

**SUPPORTING WOMEN WITHIN THE BUILT ENVIRONMENT:**

A Design Proposal for a Civic Centre for Durban

By:

Brijesh Govan

Supervised By:

Mr M. N.Mthethwa

A Dissertation Submitted in partial fulfilment of the  
Requirements for the degree of Master of Architecture to  
The School of Architecture, Planning and Housing  
University of KwaZulu-Natal  
Durban, South Africa  
July, 2013

## DECLARATION

I declare that this dissertation is my own, unaided work and carried out exclusively by me under the supervision of Mr Majahamable Nene Mthethwa. It is being submitted for the partial fulfilment of the requirements for the degree of Master in Architecture at the University of KwaZulu-Natal. It has not been submitted before for any degree or examination in any other University.

.....  
Student Name

.....  
Signature

.....  
Date

## ACKNOWLEDGEMENTS

I would like to express gratitude to the following people for their assistance in the production of this dissertation:

My supervisor, Mr M. Mthethwa for his guidance and supervision during the research process, your help is greatly appreciated.

The Postgraduate Academic staff at the School of Architecture for always being encouraging, available for assistance and never failing to give support.

Mr T. Reddy at the Barry Biermann Library, for your consistent guidance.

My colleagues for making this process a memorable and enjoyable experience.

A word of thanks to all the respondents, Mrs G. Degee, Ms S.Singh and to Mr P. McInerney for sourcing drawings from the Co-Arc International Architects Inc. archive.

To my parents and sister, your encouragement and prayers always reached me when I needed them the most.

Thank you all.

## **DEDICATION**

*I would like to dedicate this to my family for their unfailing love and support throughout my studies. I would never be where I am without you.*

*I am forever grateful, thank you.*

## **ABSTRACT**

Socially restrictive systems such as patriarchy, colonialism and apartheid produced stigma regarding the involvement of women within society. These systems have manifested power relations and gender dynamics into the built environment and related infrastructure. Due to embodying beliefs from these systems which marginalized females, the resultant spaces remain largely unsupportive of women's needs and lifestyles. Women are thus often alienated within the urban fabric, affecting freedom of movement and social involvement.

This dissertation seeks to determine conditions and criteria which would inform the built environment so as to be more supportive of women with regard to these social and spatial challenges. The researcher put forth a theoretical framework which guided the investigation using the concept of 'supportiveness' along with the theories of genius loci and organic architecture. Relevant literature and past and present environments supportive of women, were explored. The information gathered was then evaluated through precedents, case studies and primary research to determine parallels or deviances.

The findings of this investigation validated that social and gender dynamics influence the way in which women perceive and utilise their environments. The ability for a space to foster an identity containing notions of freedom, informality, safety and democracy was proved to be imperative for supporting women. The study presents recommendations as to how built environments may be more supportive towards women, such as fostering a meaningful and nurturing identity as well as containing a safe and functional interface.

## TABLE OF CONTENTS

DECLARATION .....	ii
ACKNOWLEDGEMENTS.....	iii
DEDICATION .....	iv
ABSTRACT .....	v
TABLE OF CONTENTS.....	vi
LIST OF ILLUSTRATIONS.....	xi

### PART ONE

#### BACKGROUND RESEARCH ON ISSUES

<b>CHAPTER 1: INTRODUCTION.....</b>	<b>1</b>
<b>1.1 INTRODUCTION .....</b>	<b>1</b>
1.1.1 Background .....	1
1.1.2 Motivation/ justification of study.....	2
<b>1.2 DEFINITION OF THE PROBLEM, AIMS AND OBJECTIVES ...</b>	<b>3</b>
1.2.1 Definition of the problem.....	3
1.2.2 Aims .....	4
1.2.3 Objectives.....	4
<b>1.3 SETTING OUT THE SCOPE/ DELINEATION .....</b>	<b>5</b>
1.3.1 Delimitation of the research problem.....	5
1.3.2 Definition of terms .....	6
1.3.3 Stating the assumptions.....	7
1.3.4 Key question.....	7
1.3.5 Research sub-questions .....	7
1.3.6 Hypothesis.....	8
<b>1.4 THEORETICAL FRAMEWORK.....</b>	<b>9</b>
<b>1.5 RESEARCH METHODOLOGY .....</b>	<b>13</b>
<b>1.6 CHAPTER OUTLINE .....</b>	<b>15</b>

<b>CHAPTER 2: THE IMPACT OF SOCIAL SYSTEMS ON WOMEN</b>	17
2.1 Introduction .....	17
2.2 Cultural associations of women.....	17
2.3 Gender dynamics and the environment .....	19
2.4 Women and urbanisation .....	25
2.5 Associations of women in south africa.....	29
2.6 Conclusion .....	34
<b>CHAPTER 3: CONDITIONS SUPPORTIVE OF WOMEN INFLUENCING THE BUILT ENVIRONMENT</b>	35
3.1 Introduction .....	35
3.2 Functionality .....	35
3.3 Accessibility and movement.....	37
3.4 Democratic spaces .....	38
3.5 Meaningful form.....	39
3.6 Planning and layout .....	42
3.7 Safety .....	43
3.8 Human scale .....	45
3.9 Conclusion .....	47
<b>CHAPTER 4: ARCHITECTURE SUPPORTING WOMEN</b>	48
<b>4.1 The Ubuntu Centre</b> .....	48
4.1.1 Background .....	48
4.1.2 Location map.....	48
4.1.3 Historic and social context .....	48
4.1.4 Justification of precedent .....	49
4.1.5 Empirical data .....	49
4.1.4.1 Concept.....	48
4.1.4.2 Design layout.....	50
4.1.4.3 Physical Structure and Form.....	51
4.1.4.4 Scale.....	52
4.1.6 Conclusion.....	54

4.2 <b>Rufisque Women’s Centre</b>	55
4.2.1 Introduction.....	55
4.2.2 Location map.....	55
4.2.3 Historic and social context.....	56
4.2.4 Justification of precedent.....	56
4.2.5 Empirical data.....	56
4.1.4.1 Concept.....	55
4.1.4.2 Design layout.....	56
4.1.4.3 Physical Structure and Form.....	57
4.1.4.4 Scale.....	58
4.2.6 Conclusion.....	61
<b>CHAPTER 5: CASE STUDIES</b> .....	62
<b>5.1 Germiston Civic Centre</b> .....	62
5.1.1 Introduction.....	62
5.1.2 Location map.....	62
5.1.3 Historical and social context of case study.....	62
5.1.4 Justification of case study.....	63
5.1.5 Empirical data:.....	63
4.1.4.1 Concept.....	62
4.1.4.2 Design layout.....	63
4.1.4.3 Physical Structure and Form.....	67
4.1.4.4 Scale.....	68
5.1.6 Conclusion.....	71
<b>5.2 Mpumalanga Provincial Government Complex</b> .....	72
5.2.1 Introduction.....	72
5.2.2 Location map.....	73
5.2.3 Justification of case study.....	73
5.2.4 Historical and social context of study.....	73
5.2.5 Empirical data.....	74
4.1.4.1 Concept.....	73
4.1.4.2 Design layout.....	74
4.1.4.3 Physical Structure and Form.....	75

4.1.4.4 Scale.....	77
5.2.6 Conclusion.....	79
<b>CHAPTER 6: ANALYSIS AND DISCUSSION .....</b>	<b>80</b>
6.1 Introduction .....	80
6.2 Supportive environments .....	80
6.3 Vulnerability and the built environment.....	82
6.4 Women and public space.....	83
6.5 Safety concerns.....	85
6.6 Conclusion .....	89
<b>CHAPTER 7: CONCLUSIONS AND RECOMMENDATIONS.....</b>	<b>90</b>
7.1 Conclusions .....	90
7.1.1 Democratic space .....	92
7.1.2 Privacy and safety .....	93
7.1.3 Meaningful and Nurturing environments.....	93
7.2 Recommended Future Research.....	93
<b>REFERENCES .....</b>	<b>96</b>
<b>BIBLIOGRAPHY .....</b>	<b>101</b>
<b>APPENDICES .....</b>	<b>105</b>
Sample of Focused Interview: .....	106
Sample of Questionnaire .....	109

**PART TWO**  
**DESIGN REPORT**

**CHAPTER 1: INTRODUCTION**

1.1 Introduction.....	114
1.2 Theoretical Framework.....	114
1.2.1 Genius loci.....	115
1.2.2 Organic Architecture.....	116
1.3 Brief and Accommodation Schedule.....	117
1.3.1 Informants.....	117
1.3.2 Clients.....	117
1.3.3 Detailed Brief.....	117
1.3.4 Accommodation Schedule.....	118

**CHAPTER 2: SITE SELECTION**

2.1 Site Selection.....	122
2.2 Justification of Site.....	123
2.3 Opportunities present on site.....	123
2.4 Environmental Study.....	123

**CHAPTER 3 : DESIGN DEVELOPMENT**

3.1 Concept.....	124
3.2 Final Design Presentation.....	128
3.3 Technical Resolution.....	139

<b>REFERENCES.....</b>	<b>143</b>
------------------------	------------

<b>LIST OF FIGURES.....</b>	<b>144</b>
-----------------------------	------------

## LIST OF ILLUSTRATIONS

### CHAPTER 2

Plate 2.1. The symbol of Yin and Yang, representing the equal, complimentary principles of Female and Male. (www.taoism.about.com) .....	17
Plate 2.2 Artists rendition of the primordial entity of Prakriti (www.indiannetzone.com) .....	18
Plate 2.3. The typical European medieval dining room layout, showing clear orientation towards a cultural corner and hierarchal seating positions. (Rapoport, 1969:54) .....	21
Plate 2.4 Monogamous Mofoufarm in Cameroon (Rapoport, 1969:56) .....	23
Plate 2.5 Polygamous Moundangfarm in Cameroon (Rapoport, 1969:56).....	23
Plate 2.6 Diagrammatic analysis of gender dynamics in the Muslim city of Isphahan. (Rapoport, 1969:73).....	24
Plate 2.7. Artists impression of the Agora marketplace. (www.michellteachers.org) .....	25
Plate 2.8. Plan of Agora (www.greeceathensaegeaniinfo.com) .....	25
Plate 2.9. An artists impression of the dynamic between men and women showing body language of domination and subordination. (Haydon, 1986:211).....	27
Plate 2.10 A vintage advertisement for vitamins.(www.weburbanist.com/2010/05/18/old-school-vintage-ads) .28	
Plate 2.11. The bronze figure representing women mourning a dying child. This represents women as vulnerable individuals. (www.travelblog.portfoliocollection.com) .....	31
Plate 2.12. The multimedia monument commemorating the protesting women who chanted “Wathint’ abafaziwathint’ imbokodo” .which translates to “Strike the women, strike the rock.” (www.rememberoursisterseverywhere.com) .....	32
Plate 2.13. The current derelict condition of the Wall of Hope in GuguDlaminipark conveys a different message than initially intended. The vandalism of the monument hints at society’s respect towards memorials for women. (Marschall, 2010, 271) .....	33

### CHAPTER 3

Plate 3.1 The Sekii Womens Clinic. (Pollock, 2002:136) .....	35
Plate 3.2. The first floor plan (top) and ground floor plan of the women’s clinic. (Pollock, 2002:137) .....	36
Plate 3.3 Ramp integral to staircase. (www.flickr.com/photos/borkazoid/4202740785) .....	36
Plate 3.4A woman pulling a pram up a staircase. (Mulholland, E www.telegraph.co.uk/news/uknew/).....	37
Plate 3.7 The Northern Cape Legislature Building (www.lfsarchitects.com) .....	38
Plate 3.6 The slanted columns in the foyer of the Constitutional court. (www.allatsea.co.za/mygallery/jhb2/concourt03.jpg) .....	38
Plate 3.5. The Guggenheim Museum (www.nadaad.....	38
Plate 3.8: The curving pathways in the Chicago Women’s Park and Garden contain symbolism .(http://www.chicagoparkdistrict.com/parks/Chicago-Womens-Park-and-Gardens) .....	39

Plate 3.9	The curvilinear forms which form floors, walls and ceilings. ( <a href="http://www.zaha-hadid.com/architecture">www.zaha-hadid.com/architecture</a> ).....	40
Plate 3.10	Elevation of the HeydarAliyevCulture Centre ( <a href="http://www.zaha-hadid.com/architecture">www.zaha-hadid.com/architecture</a> ) .....	40
Plate 3.11:	Section of the HeydarAliyev Culture Centre. ....	40
Plate 3.12	The curvilinear aesthetic treatment of the CHA Women and Children’s hospital ( <a href="http://www.architectureweek.com/2008/0917">www.architectureweek.com/2008/0917</a> ) .....	41
Plate 3.13	The street facade and entrance. ( <a href="http://www.architectureweek.com/2008/0919">www.architectureweek.com/2008/0919</a> ) .....	41
Plate 3.15	The building allows for passive interaction to occur on many direct and indirect levels. ( <a href="http://www.womensportvillage.com">www.womensportvillage.com</a> ) .....	42
Plate 3.14:	A perspective of the World Village of Women Sports Centre showing its context and connective pathways.( <a href="http://www.womensportvillage.com">www.womensportvillage.com</a> ) .....	42
Plate 3.16	Transparent bus shelter. ( <a href="http://p.globalsources.com/IMAGES/PDT/B1057019618/Bus-Shelters.jpg">http://p.globalsources.com/IMAGES/PDT/B1057019618/Bus-Shelters.jpg</a> ) .....	44
Plate 3.17	A 360 degree isovist visibility diagram showing the area of sight in relation to viewer and environment. ( <a href="http://www.lindaheard.com">www.lindaheard.com</a> .....)	44
Plate 3.18.	The scale of steps with regard to men and women and footwear. (Sinnot, 1985:137) .....	45
Plate 3.19	human scale elements encourage human interaction and feelings of either comfort or vulnerability. ( <a href="http://www.despangarchitekten.com">www.despangarchitekten.com</a> ) .....	45

## CHAPTER 4

Plate 4.1	Aerial photograph of the Ubuntu Centre in Zwide, Port Elizabeth. ( <a href="http://www.earth.google.com">www.earth.google.com</a> ).....	48
Plate 4.5	The various programmes offered by the centre. ( <a href="http://www.architectmagazine.com/design/the-ubuntu-center">www.architectmagazine.com/design/the-ubuntu-center</a> ).....	50
Plate 4.2	Conceptual sketch of form (Field, 2010:90) .....	50
Plate 4.3	South Elevation (Field, 2010:90) .....	50
Plate 4.4	Section through Multi Purpose Hall and HIV/Tb clinic. (Field, 2010:90) .....	50
Plate 4.6	The building is situated within the framework of existing informal paths( <i>Field,2010:90</i> ).....	51
Plate 4.7	Ground floor plan of the Ubuntu Centre ( <i>Findley, 2011:48</i> ).....	51
Plate 4.9	The view of the Centre from the main road. The trapezoidal forms give the building character and presence whilst still maintaining a harmonious dialogue with the geographical setting through the use of strategic materials. ( <a href="http://www.arisvrakas.com/colour/ubuntu-education-fund">www.arisvrakas.com/colour/ubuntu-education-fund</a> ).....	52
Plate 4.8	The First Floor Plan . Source (Field, 2010:89) .....	52
Plate 4.10	Planting areas integral to the building ( <a href="http://www.fieldarchitecture.com">www.fieldarchitecture.com</a> ) .....	53
Plate 4.12	Sectional elevation. ( <i>Findley, 2011:47</i> ).....	53
Plate 4.11	Interior view of the Multi Purpose Hall ( <a href="http://www.fieldarchitecture.com">www.fieldarchitecture.com</a> ).....	53
Plate 4.13	Interior courtyard of the Rufisque Womens Centre ( <a href="http://www.hollmenreutersandman.com/portfolio">www.hollmenreutersandman.com/portfolio</a> ) .....	55
Plate 4.14	Location map of the Rufisque Womens Shelter (Varandah, 2004:2) .....	55
Plate 4.15	The traditional concept of a settlement around Boabab Trees (Varandah, 2001:14).....	57
Plate 4.16	Floor Plan of the Women’s Shelter. (Lang Ho, 2003:75) .....	58
Plate 4.17	The colonnade softens the transition between interior and exterior (Varandah, 2004:17) .....	58

Plate 4.19 Northeast southwest section. (Lang Ho, 2003:75) .....	59
Plate 4.18 Southwest northeast section (Lang Ho, 2003:75) .....	59
Plate 4.20 The building utilises local building methods and is painted a vibrant red conveying notions of strength. (www.archithoughts.wordpress.com/2011/03/31/womens-centre-in-rufisque).....	59
Plate 4.21. The sensitive scale of the women’s centre(www.bustler.net/index.php/article/.....	60
Plate 4.22 The traditional thatched roof reduces the visual scale of the room. (Varandah, 2004:16) .....	60
Plate 4.23 The sun screens produce a pattern which breaks away from monotonous and anonymous facades (Varandah, 2004:17) .....	60

## CHAPTER 5

Plate 5.1 Location of Germiston Civic Centre (www.earth.google.com).....	62
Plate 5.2 The use of light adds a dynamic spatial character to the interior (www.co-arc.com).....	64
Plate 5.3 Floor plans of the Germiston Civic Centre.(Co-Arc International Architects Inc. 1972.).....	65
Plate 5.4 Ground Floor Plan of the Library (Co-Arc International Architects Inc. 1972.).....	66
Plate 5.5. Ground Floor Plan of the healthcare facility.(Co-Arc International Architects Inc. 1972.) .....	67
Plate 5.6 The public hall and adjacent lavatories (Co-Arc International Architects Inc. 1972.) .....	67
Plate 5.7 Perspective of the Germiston Civic Centre (www.co-arc.com).....	68
Plate 5.9 The height of the chamber is gradually achieved and is not dominating over the surrounding built form. (Co-Arc International Architects Inc. 1972.) .....	69
Plate 5.8 The bricks create a horizontal pattern along the façades which diminishes the scale of the building (www.co-arc.com).....	69
Plate 5.10 The amphitheatre features human scaled elements such as stairs and seating (www.co-arc.com).....	70
Plate 5.11 Design treatment which add character and reduce the scale of environments. (www.co-arc.com).....	70
Plate 5.12 Perspective of the Mpumalanga Provincial Government Complex (www.co-arc.com).....	72
Plate 5.13: Site layout of the Mpumalanga Provincial Government Complex. (Malan &McInerney, 2001:26) .	73
Plate 5.14: The conceptual forms behind the planning of the complex. (Malan &McInerney, 2001:24) .....	74
Plate 5.15: Women performing embroidery to create the art panels used in the legislative chamber (Malan &McInerney, 2001:120).....	74
Plate 5.16. Floor plan of the Legislature building (Malan &McInerney, 2001:36).....	75
Plate 5.17. West elevation and Section through the legislative chamber (Malan &McInerney, 2001:37) .....	75
Plate 5.18: The complex is situated directly adjacent to the Nel and Crocodile River. (Malan &McInerney, 2001:20) .....	76
Plate 5.19: The administrative buildings overlooking and connecting with the NelsRiver (Malan &McInerney, 2001:131) .....	76
Plate 5.20: The building embraces the natural surroundings and blends in harmoniously. (Malan &McInerney, 2001:60) .....	76
Plate 5.21: Many facades within the buildings reflected patterns and symbols utilised by local women (Malan &McInerney, 2001:39).....	77

Plate 5.22: The chamber incorporates a colourful and detailed interior, adding texture and character to the space (Malan &McInerney, 2001:39) .....	77
Plate 5.23 The wide staircases used throughout the complex (Malan &McInerney, 2001:51) .....	77
Plate 5.24: Various elements of the complex, the walkways, decks and vegetation create an intimate experience. (Malan &McInerney, 2001:43) .....	78
Plate 5.25: The complex incorporates a diversity of intricate aesthetic and structural design elements. (Malan &McInerney, 2001:43).....	78

## **CHAPTER 6**

Plate 6.1Planning layout of the support centre on the first floor of office block (Created by Author).....	81
Plate 6.4 Narrow Pathways (Authors own).....	87
Plate 6.2 Transparent bus shelters (Author own image) .....	87
Plate 6.3 The blank facade is described as the ‘back’ of the building (Authors own image) .....	87
Plate 6.5 The irregular columns within the Wits science stadium (Authors own image).....	88
Plate 6.6 Design treatments within the Melrose Arch Precinct.(Authors own image) .....	88

# **CHAPTER 1: INTRODUCTION**

## **1.1INTRODUCTION**

### **1.1.1BACKGROUND**

The society of South Africa is currently in a restrictive predicament regarding women's involvement in society. Predominant social systems such as traditional culture, patriarchy, colonialism and apartheid assimilated to produce cultural stigma regarding the position, involvement and status of women in society (Bay, 1982:11). As social and cultural activities contain embedded symbolism and beliefs, it is of note that although current legal framework is in place protecting the equality of women, stigma still remains deeply embedded in societal dynamics (Larsson et al, 1998:6). This stigma has produced culturally derived consequences within the urban fabric, which have and continue to marginalize women (Wasserman, 2012:9).

An underlying consequence involves the manner in which various urban and cultural landscapes have largely ignored the needs and representation of women with regard to infrastructure (Fainstein, 2005:8). Modernisation and urbanisation in South Africa occurred during an era when ruling elites saw private related activities as separate from public and economic functions. The segregation of public and private spheres initially marginalized women who upheld domestic responsibilities, ultimately alienating them from any public involvement (Haydon, 1998:3). In modern times, women are as active as men in the public sphere yet still hold many commitments to private activities and thus require mixed use precincts which cater for both needs. This is coupled with a general urban infrastructure which seeks to define boundaries through systems of inclusion and exclusion. This environment causes the resultant alienation of women with regard to their environment.

Spaces and urban precincts constantly remind females that their needs and lifestyles are not supported within public spaces, therefore deterring use and inducing separation. A lack of supportiveness with an environment disrupts the connection between many women and their daily spaces. It becomes clear then that built environments, which ultimately forms part of a woman's self identity, should communicate a clear narrative that her needs and behavioural

patterns are catered for. This supportive environment needs to look at the various layers in which spaces have marginalized women with regard to spatial planning, function and design.

### **1.1.2 MOTIVATION/ JUSTIFICATION OF STUDY**

Unsafe and unsupportive spaces alienate many women and as a result these individuals avoid these places, often ultimately impairing their movement, social involvement and work potential (Fainstein 2005:8). Due to the cultural association of relationships and responsibilities of infant and childcare, the sensitivity of spaces in relation to women is increased. An investigation into the effects and supportive nature of public spaces with regard to women is crucial in determining environmental needs and challenges faced by females. It is possible that current infrastructure in public developments could serve as platforms which alienate women and lead to social disintegration and could have inhospitable design commentary towards women, provoking feelings of discomfort. Since spatial configurations convey systems of power relations women feel vulnerable in situations where their integrity and private space is compromised (Wasserman, 2012:9). Investigating the way in which environments can be utilised to support women through the built environment will produce valuable information in an overlooked area of architectural discourse.

An understanding of how the built environment can be supportive of women will allow one to recognise what are the factors which contribute to supportive and comfortable environments and how they can be expressed architecturally in order to produce an environment which is responsive to the needs of women. The information gathered in this study will also be an important addition to architectural discourse in general as studies regarding this topic are few. This research will produce data which will aid in creating awareness of the need to produce environments which are supportive of women.

## **1.2 DEFINITION OF THE PROBLEM, AIMS AND OBJECTIVES**

### **1.2.1 DEFINITION OF THE PROBLEM**

Social inequality exists towards women within public spaces as various gender dynamics are performed which reinforce cultural stigma and gender roles, space is a product of social phenomenon (Wasserman, 2012:7). As a result of these social mechanisms, there are many associations of women and public spaces which are constantly reinforced in societies and infrastructure. Public spaces and precincts, which have predominantly been informed by the views and beliefs of systems such as Apartheid, Colonialism and patriarchy, are unsupportive of the needs and challenges faced by women (Bay, 1982:11). The marginalisation of women takes place on a large scale in terms of the planning of cities whereby urbanisation has produced homogenous and utilitarian environments which segregate private and public domains. This is coupled with the historic cultural stigma that a women's place remains in the domestic sphere and that the public domain on political and economic platforms, is orientated towards men (Fainstein, 2005:4). Media, workspace dynamics and cultural associations of women within society all contribute towards the marginalisation of women creating various consequences socially and physically in built infrastructure.

This problem is carried through to an immediate and interactive scale between women and their environments. It is known that women in particular face much harassment and violence as a result of cultural stigma and social dynamics whereby a woman is seen as 'public property' (Haydon, 1986:211). By nature public spaces are platforms whereby observation, spectatorship and exhibitionism occur naturally, however when implemented in an insensitive manner, mechanics of power are often put into place. This allows individuals in one space to have spatial-related advantages over others and potential crimes are given platforms in which to occur (Crowe, 2000). Females understand this and the fear of harassment warns her not to place her body in that situation at all, thus leading to a restrained use of public spaces especially when alone or under poor visibility conditions. Thus women's freedom of movement is compromised, and a spatial inequality manifests. Spaces are often symbolic of certain characteristics which are identified as dangerous or prone to be catalysts for subjugation (Wasserman, 2012:15)

As a result of constant cultural stigma produced by society, the vulnerability of women within public spaces becomes a prominent issue within public space. This problem has been shown to affect the way in which women form associations within public environments. Characteristics may be identified as welcoming, passive or obtrusive and uncomfortable. These cues within the environment serve as symbolic markers which are identified by women and contribute towards the overall identity and character associated with an environment (Wasserman, 2012:14). Comfort and ease of passive use is of paramount importance when creating a supportive environment for women, especially those in vulnerable circumstances or individuals with infant and childcare commitments. Physical conditions of environments allow or prevent activities from occurring and these should be conducive to the behavioural patterns and lifestyles of women.

Spaces which are not supportive on a physical level deter human use and engagement as well as evoke feelings of discomfort and uncertainty. These factors alienate women further and restrict public involvement, mobility and quality of life. (Lico 2001).

### **1.2.2 AIMS**

The study seeks to determine conditions and criteria which will inform spaces and built environments so as to be more supportive of women.

### **1.2.3 OBJECTIVES**

To understand the nature of social dynamics which influence the associations of women within society.

To evaluate how these dynamics have transpired into built environments and urban settings.

To determine conditions which have been found to be supportive towards women.

To propose a building typology as a vehicle to demonstrate the theoretical issues and argument presented in this research

### **1.3 SETTING OUT THE SCOPE/ DELINEATION**

#### **1.3.1 DELIMITATION OF THE RESEARCH PROBLEM**

The key terms in this investigation may be explored through various disciplines, however this research will focus on architectural discourse and inquiring into other disciplines only when necessary. This study seeks to deduce practical design criteria for creating responsive conditions with regard to women and their environments. Power relations within culture and spatial configurations will be investigated as these perpetuate social constructs which may marginalise women.

The design of this research is not to be solely interpreted as an act of the isolation of woman from men or gender discussions, but rather as an endeavour which seeks to determine characteristics and conditions of environments which encompass the current needs, challenges and lifestyles of women in relation to the built environment. Thus the purpose is not concerned with producing non-sexist space or seeking to affirm or confront any social stipulations, it is to determine a set of conditions which would increase the quality of space as experienced by women through the use of strategic planning and architectural design. The intention is not to perpetuate the segregation and categorisation of women in terms of isolating them in this study, the target-group method employed within this study seeks to discover viable, supportive and distinct notions which could encourage female participation and interaction with environments. Thus in the resultant theoretical space this study will yield, every individual would be able to function as they would normally in any given space, although women in particular are safeguarded against spatial vulnerability and alienation. The investigation does not alienate other groups within this study, merely focusing explicitly on the challenges and issues regarding women.

Although the proposal is situated within the built fabric of Durban, the study may also be a demonstration to architecture in general. Precedents and case studies will be directly relevant to the task at hand, being in areas subject to Colonialism and in a Third world environment. Research into the way in which an environment contains a narrative regarding its users behavioural patterns will be explored and precedent studies and case studies will seek to provide data to aid the investigation. .

Although the aim of this investigation is to inform the design of a public building, respondents to questionnaires will be located in various environments, from public to private. Information gathered from respondents will also reveal the current status quo regarding what people's perception of men and woman are in the city of Durban.

### 1.3.2 DEFINITION OF TERMS

Built environment	Environments and spaces which are created by humans, this refers to physical buildings as well as open environments such as parks which act as a setting for human activity to occur
Culture:	Socially constructed patterns of values, beliefs and other meaningful mechanisms which are associated with a particular way of life of a group of individuals
Gender	The associations which a culture constructs based on the difference between individuals in relation to each other. These differences include sex, ethnicity, behaviour and language.
Identity:	The set of constructs through which people view themselves, others and through which others see them
Marginalisation	The act of relegating an individual or group to a lower status of social standing.
Prakriti:	The female principle in Vedic ideology, synonymous with nature and complimentary to Parusha, the male principle
Public Space:	Spaces which are accessible, available and usable to all people. These spaces maybe enclosed buildings such as public libraries or open spaces such as parks.
Stigma :	Persistent associations of individuals based on cultural perspectives perspectives. This is a result of socio-cultural influences.

Supportiveness: How successful a space is in terms of responding to its users lifestyles, needs, behavioural patterns and beliefs

Symbolism: The representation of meanings through an object, this occurs when an object is identifiable as associative of a particular meaning

### **1.3.3 STATING THE ASSUMPTIONS**

The built environment can influence the way in which individuals view each other, themselves and provide the platform for social inclusion and exclusion to occur. The built environment is directly connected to issues of gender, power and identity and the articulation of these within space may impact the quality of its user's lives.

### **1.3.4 KEY QUESTION**

How do conditions which are supportive towards women influence the built environment?

### **1.3.5 RESEARCH SUB-QUESTIONS**

What is the nature of social dynamics which influence the associations of women within society?

How have these dynamics transpired into built environments and urban settings?

What conditions have been found to be supportive towards women?

What building typology could be proposed as a vehicle to demonstrate the theoretical issues and argument presented in this research?

### **1.3.6 HYPOTHESIS**

Conditions which are supportive towards women can influence the design of the built environment. Spaces are platforms where gender dynamics occur, architecture which is informed by these dynamics will influence the built environment so as to be more supportive of women.

## **1.4 THEORETICAL FRAMEWORK**

In order to set a foundation in place which will guide this investigation it is important to define and understand the concept of ‘supportiveness’ as this will determine the perspective applied in analysing issues supportive to women. Research will begin through the work of Rapoport whose views regarding ‘Supportiveness’ will be expressed.

### **“Supportiveness”**

The concept of supportiveness is the central concept around which this research investigation takes place. In order to grasp a relevant understanding of the concept it is important to explore the definitions of supportiveness with regard to architectural discourse. In this context it is almost always concerning the fit or relationship between a built environment and its users. The better the fit and engagement between user and environment the more indicative it is of a supportive space (Mthethwa, 2001:22). Thus the supportiveness of a space is an environment’s capacity to allow various activities and behavioural patterns to occur within and around it. Thus people’s lifestyles, behaviour and way of life are crucial shaping factors of the environment. These attributes are largely culture based factors; therefore there are numerous solutions which are implemented in the hopes of responding to the behaviour of different cultures. A primary researcher in this area is Amos Rapoport who undertook a series of studies concerning the relationship between human behaviour and the built environment (Rapoport, 1989:2).

Rapoport states that environments should be supportive of the important activities, components and institutions of a particular culture (Rapoport, 1990). An investigation into the lifestyle and resultant activities should take place as these two factors provide the linkage through to the built environment. The components of any given activity are, as per Rapoport : the activity itself, the manner in which it is carried out, how it is linked to other activities and integral to activity systems and lastly the meaning of the activity (Rapoport, 1990:11). As one moves through the various components of a given activity it becomes clear that cultural preferences will create various different scenario’s as to how an activity is carried out in accordance to the priority of the activity in that particular culture.

Rapoport states that when responding to the lifestyles and activities performed by any given culture through the built environment it is imperative not to look at activities in isolation (Rapoport, 1990:12). Activities form part of activity systems in order to respond to lifestyles in a proper manner by incorporating the aspects of time and space. Research has also shown the importance of activity systems acting as social and cultural support structures (Mthethwa, 2001:32). The interlinking of activities is crucial if the lifestyles and behaviour of a culture is to be supported. This is important because people do not live or engage with single activities or buildings in isolation, they make use of multiple environments and activities to carry out their daily lifestyles and routines. It has been said that people inhabit cultural landscapes, varying from public to private and indoor to outdoor, activities of necessity and activities of leisure (Rapoport, 1990:12).

Supportiveness is thus integral to the concept of identity, which is itself viewed as a set of constructs through which individuals see themselves, others and through which other people see them (Mthethwa, 2001:51). The concept of identity itself involves the understanding and association of symbols and meanings within an environment. These existential meanings are the associations given to the identifiable design elements which are associative of behaviour or activity.. Symbols have an important role in the manner in which people perceive, interpret and shape their environment. When executed successfully they convey meaning and create a sense of place. Where there is a lack of connection between the identity of built form and its users there is a break in the interactivity where users feel uncomfortable and alienated from their surroundings.

#### **1.4.1 Genius Loci**

Many researchers have observed that women desire environments that convey meaning and a level of intimacy, this is deemed to be a solution for anonymous and homogenous spatial conditions which induce anxiety among women.(Wasserman, 2012:6).

Norberg - Schulz states that people require and desire meaningful architecture in which to truly engage and interact with. These places have a metaphysical character and atmosphere called *genius loci* or the 'spirit' of a place. There are three categories through which *genius loci* can be understood and interpreted; romantic, cosmic and classical (Norberg-Schulz,

1980:69). The *romantic* classification relates to the unrestrained character and mysterious connotations of a place and draws its meaning from being dynamic and 'alive.' The place seems to achieve its character from the landscape and the dialogue between raw elements in nature. Romantic spaces are free from organisational control, and its meaning is illogical and indefinable yet prominent nonetheless. The dynamic nature of light is used to form and animate characteristics as opposed to the physical forms themselves. These places draw their existential qualities through the natural world and its elements (Norberg-Shulz, 1980:69)

*Cosmic* architecture refers to man-made environments that manifest through logic, organisational control and definable structures. These environments create order which can be identified by various cultures as being political or social systems which classify and define boundaries, inclusion and exclusion. This form of architecture does not exude notions of genius loci on its own and must assimilate with another category if existential meaning is to be achieved (Norberg-Shulz, 1980:71).

*Classic* architecture is understood as an articulation of various elements, often on a larger scale. This refers to the characteristics of streets and settlements as opposed to spaces in individual buildings. These articulated landscapes can therefore contain a dynamic and animated character as the different activities and movements of people produce an atmosphere, even if various buildings are static and rigid (Norberg-Shulz, 1980:73). It is stated that spaces such as these offer a democratic freedom in that there is no unquestionable system in place determining rational set factors and elements. These settings form their own 'organic' presence, a living entity with its own constituent parts which functions separately yet eventually link together. (Norberg-Shulz, 1980:74)

These classifications are rarely found in isolation and *Complex* architecture is the term used by Norberg-Shulz to define the circumstance when all three classifications are assimilated and evident (Norberg-Shulz, 1980:75).

## 1.4.2 Organic Architecture

The link between woman and the natural environment is well known and transcends the mere reproductive association. In Indian cosmology, the female principle is known as *Prakriti* and is synonymous with Mother Nature, representative of a playful and spontaneous entity. This primordial entity creates a diversity of living and non-living forms. The inanimate world however is not a lifeless shell, the rivers and mountains also contain a hidden consciousness (Shiva, 1988:39). *Prakriti* is also said to have created complimentary factors, where the living and non living creations require each other in order to exist, there is no distinction between the two. (Shiva 1988:41).

Wright put forth the idea that all parts in an organic system are equal and that the part is as important to whole entity as the whole entity is to the part. Using this deduction Wright states that man should incorporate nature in his plans of development as this is the only way forth as an organic whole (Wright, 1945:127). This integration and importance of every individual in relation to each other and their environment is why Wright calls the organic architecture, the architecture of democracy. Organic architecture is a philosophy which promotes a harmony between human habitation and the natural world through sensitive design approaches. A building is to be so well integrated with its surroundings through careful design that its furnishes and form become part of the context. Schulz states that in order to produce an effective and meaningful space, the character and essence of the natural surroundings must be captured (Schulz, 1971:31)

This theory is relevant to the study at hand as many spatial systems which have historically restricted women manifest their dividing characteristics through the process of boundary formation and unquestionable distinctions between zones. Organic architecture is a process which softens the distinction between the living and non-living and as a result produces an unrestrained and 'free' natural environment (Wright, 1945).

## 1.5 RESEARCH METHODOLOGY

This dissertation will involve research to form a conceptual and theoretical underpinning of elements which aid the built environment in supporting female lifestyles, challenges and needs. This research will be in the form of collections of data. This data will facilitate the process through which the study of gender dynamics and its representation into the built environment will be achieved successfully.

Conceptual and theoretical grounding will form the basis through which relevant literature and precedent studies are critically analysed. The set of criteria includes the design layout and functions of spaces which will exhibit how environments are directly supportive towards women, revealing power relations and spatial dynamics. Physical structure, and form will also reveal how successful spaces are in conveying semiotics, and in retaining a welcoming identity and character towards women. Finally, scale and contextual response will show how the buildings have attempted to create a meaningful and passive interface. The key precedents of this research are the Ubuntu Centre, which offers much functionality and support towards women and Rufisque Women's Shelter. As this study seeks to uncover general demonstrations of the built environment being supportive towards women, case studies will be of a civic nature as this is the domain where women have historically been restricted. The Mpumalanga Legislative Complex and the Germiston Civic Centre are examples of civic architecture which have utilised design consideration addressing notions of spatial equality and democracy. The study will include qualitative means for gathering information. The collection of this data will ultimately answer the key questions which were set out at the beginning of this study.

### *Primary data:*

- Formal and informal interviews with women, male and female architects and key personnel as well as observations. A specific interview with Ms. Saasha Singh, a psychologist who has dealt with vulnerable women, will aim to grasp the psychological mechanisms present regarding women and their relation to spaces. Mrs Gloria Degee, the representative of the Shiloh House of Hope women's shelter was also interviewed so as to gain insight as to the nature of

challenges faced by women within the city of Durban. Discussions with various female architects will also reveal conditions and criteria which will aid in creating environments which are more supportive towards women.

- Questionnaires will seek to determine conditions which make environments supportive and unsupportive as well as how various women perceive their environment. For this purpose a diversity of females will be invited to participate as this will give a broader perspective of the issues at hand. Men will also be questioned so as to gain an insight into society's perceptions of challenges faced by women. Although this study calls for a qualitative approach, statistics will reveal general preferences of women to certain ideas.

The collection of this data will ultimately answer the key questions which have been set out at the beginning of this study

*Secondary data:* This research study involves secondary sources such as books, magazines, journals and archives which will substantiate and explore new methods and principles done by authors, showing different ways in people have dealt with the study. The concepts and theories found in the literature review will provide clarity through the analytical process of critical analysis and reference by examining. A study into relevant precedents will allow one to validate the information and conditions collected in the literature review. Built environments which are supportive to women contain many layers of 'supportiveness', varying from direct supportiveness of female needs such as pregnancy and childcare, to broader issues of marginalisation and embodiment of women through democratic, civic settings. Various typologies have focused on each of these and as a result, two key precedents will be evaluated to discover how these levels of supportiveness have been dealt with. The Rufisque Women's Shelter shows a small scale approach whereas the Ubuntu Centre deals with larger issues faced by women within society

*Research materials:* Research materials will include the use of a computer, notebook, and camera. These materials will aid in facilitating the research process and acquiring of information and data.

## 1.6 CHAPTER OUTLINE

Chapter one introduces the study and outlines the direction and intent of the research investigation. The background research provides a foundation for the research to rest on and the motivation seeks to secure its relevance and purpose. A definition of the problem, aims and objectives, definition of terms and key questions are established which will guide the investigation.

Chapter two investigates the various social dynamics which influence associations in society. Traditional and imposed social systems will be investigated so as to grasp the contextual background behind cultural systems which have and continue to affect the participation of women in society. The chapter looks briefly into aspects of gender related dynamics such as patriarchy so as to understand the way in which socially constructed mechanisms perpetuate and oppress women. An emphasis will be placed on the impact of urbanization on women, as these processes manifested social and cultural views into physical spaces.

Chapter three presents and analyses built environments and design considerations which have been deemed by researchers to be supportive of women. This chapter looks explicitly at the relationship between the built environment and women. Past and present examples are presented and the resultant criteria is used in following chapters to analyse and evaluate precedents and case studies.

Chapter four evaluates precedents under the criteria established in the previous chapter. The Rufisque Womens shelter, the Ubuntu will be analysed against the criteria and theories discussed within the investigation.

Chapter five analyzes case studies under the criteria which have been established within the literature review and the theoretical perspectives within the study. The case studies are the Mpumalanga Legislative Complex and the Germiston Civic Centre. Each case study will be analysed by investigating its social context, informants and other criteria pertinent to the study at hand.

Chapter six presents the data produced by the researcher in the form of responses from discussions, interviews and questionnaires. The results will be analysed and a discussion will

take place regarding a comparison of the findings to issues raised in the literature review and the initial problems identified in this study.

Chapter seven consists of the conclusion and recommendations. The chapter addresses the key questions, assumptions, hypothesis, aims and objectives set out in the beginning of the study and puts forth recommendations based on the findings.

## CHAPTER 2: THE IMPACT OF SOCIAL SYSTEMS ON WOMEN

### 2.1 INTRODUCTION

This chapter investigates the various social and cultural systems which have and continue to marginalise and alienate women from society and their environment. Research begins by looking at the associations of women within culture and how this impacted on perceived roles within society. These associations of roles will then lead on to the manifestation of gender into built forms and environments. As the built environment embodies social values, beliefs and customs it is of interest to this study to investigate how these environments perpetuate associations and social involvement of women. These studies then lead up to an analysis of urbanisation and resultant spatial mechanisms, where dynamics which effect and marginalise women will be identified. This chapter seeks to identify the social dynamics which contribute to the disconnection, alienation and restriction of women within culture and society. Cultural associations of women within South Africa will reveal the progression of society's perception of women through the era of Colonialism, Apartheid and Democracy. Monuments of influential women also depict and explore women's involvement in the development of the country into an equal society.

### 2.2 CULTURAL ASSOCIATIONS OF WOMEN

The Chinese culture is a rich source from which information pertaining to this study can be extracted. According to Taoism ideology, the well-known symbol of *yin* and *yang* represent female and male principles respectively and gives each equal weighting (Plate 2.1). The belief states that the interaction and engagement of these two extremes give rise to all events in the universe and are necessary, complimentary factors (Ortner, 1974:68). The actual social situation in china is very contradictory to this, emphasis is placed on the importance of sons and the father as the unquestionable head of the home. With regard to gender roles, women make an unseen yet immensely valuable contribution to the economy with regard to labour and materials produced. It is interesting to note that the most worshipped deity in Chinese Buddhism is *Kuan Yin*, a goddess associated with compassion



Plate 2.1 The symbol of Yin and Yang, representing the equal, complimentary principles of Female and Male. ([www.taoism.about.com](http://www.taoism.about.com))

and mercy, as opposed to a male associated form of deity. This would suggest a matriarchal infrastructure and yet the Chinese society continues to be immensely patriarchal (Ortner, 1974:69).

According to Vandana Shiva, the feminine principle (*Prakriti*) is irreplaceable in Indian cosmology and is synonymous with nature. *Prakriti* is a powerful creative and productive force in the dialectic of creation, renewal and sustenance of all life (Shiva, 1988:38). *Prakriti* is understood as a natural force and is paired with the complimentary masculine principle of ‘consciousness’, *Parusha*. This force is worshipped in Indian tradition as the primordial power and source of vast abundance and sustenance. All forms in nature and in life are given



Plate 2.2 Artists rendition of the primordial entity of Prakriti (www.indiannetzone.com)

existence through *Prakriti* (Mother Nature) and are therefore her children. *She* is a playful and spontaneous entity, creating a diversity of living and non-living forms in

nature. In this sense the creative force and created world are one, there is no distinction or separation between the two (Shiva, 1988:38). The world is an active interrelated phenomenon of complimentary and dependant factors. *Prakriti* did not create the inanimate world as a lifeless shell, the mountains and the rivers contain a hidden consciousness in them. She lives in both living organisms and their environment wherein each needs the other in order to exist. This nurturing relationship between the creative force and the created world contrasts with the idea that people are separate and dominating over nature and their environment (Shiva, 1988:41). Shiva goes further to state that ontologically people are not separate from their environment nor is man separate from woman because in theory man originates from *Prakriti* himself. Vedic ideology states that man and woman are not separate, they are in fact inseparable compliments of each other. Everything created by *Prakriti* represents a ‘dialectical unity and of diversity within a unifying principle.’ There is therefore a harmonious relationship between man and woman. People and their environment are integral and therefore nature is inviolable (Shiva, 1988:41).

In the context of third world post-colonial countries there are a number of influences which affect the associated perspectives of women. The colonial movement brought with it set stereotypes and places. Male-determined social values argue women's inferiority and insure the ideological pre-eminence of man's sphere of activity (Bay, 1982:8). Researchers indicate that these constructs which exist between man and woman manifest through various dynamics. The dominant gender dynamic, which restricted women to stay at home, was pivotal in suppressing women when it combined with colonial restrictions against female migrants to areas and restrictions in the economic world (Larsson, 1998:6). Colonial Governments in Africa developed policies toward their subject peoples that were based on male and female conceptions of power relations as they existed in Europe (Bay, 1982:11). Man has largely been associated as the breadwinner in many Western belief systems, typically this is referred to as the domestication of women. Despite the fact that women are a majority group in many populations they are treated like a minority whose needs go unheard.

### **2.3 GENDER DYNAMICS AND THE ENVIRONMENT**

Gender dynamics takes place within a multitude of relationships and phenomenon which make up the human world (Ortner, 1974:71). All humans have a physical body and an understanding of a non physical mind which are part of some form of society and inherits some form of culture, belief and tradition. All individuals interact with their environment in order to move, live and sustain themselves. Lastly all individuals are concerned with self-survival and all societies are in a similar condition which favours sustainability and continuity. It is within these parameters that one can then investigate and understand the nature of gender dynamics in the context of culture.

According to Ortner, women have historically been associated with, or symbolic of, some form of inferior existence in relation to men (Ortner, 1974:73). This existence is often noted as less or not as important as the culture which moderates it. Here an existence which comes to mind is 'nature'. The concept of culture itself has to do with activities and mechanics which seek to transcend humanity from mere natural existence and to give meaning and order. These processes give man control and he can bend and manipulate these sets of meaning and infrastructure to his will or interest. For the purpose of this study, culture is to be representative of the human consciousness. This consciousness is what man uses to understand and shape his world around him, often seeking to control nature in the process.

Both nature and culture are constructs and in many societies the distinction and separation between the two are increasing. This distance between culture and nature is often used as gauge with which one can evaluate how civilized a group of people are. Traditional populations untouched by modern cultural influences relating to structure and roles are seen as primitive in that they have not transcended far enough above natural existence. Thus humans see the dominance and control over their environment as a higher level of being as opposed to passive and integrated functioning with nature. Thus culture is seen as not only separate from nature, but also somewhat superior (Ortner, 1974:73).

Research shows a parallel relationship between man and woman through the process of patriarchy (Ortner, 1974:73). As has been established the manner of the interaction between culture and nature involves acts of dominance and subordination. The existence of the concept of culture occurs only through the understanding of transcendence of mere natural existence, in this case the subordination and control of women by men. Culture recognizes natural existence in order to draw distinction from itself and exists through its superiority and control of nature.

The parallels between the dominance of culture over nature and men over women are numerous and few comparisons will be investigated. The association of women with nature will serve as a starting point. The obvious and first commonality is the reproductive nature of women which sees them as a direct embodiment of nature and thus representing notions of sustenance. Man, not having the same role is somewhat freed to participate in cultural activities. Thus according to the culture and nature relationship we already see preconditions where man is set to dominate and subordinate nature (woman). Her role and functions are already deemed as less important on a cultural scale and thus her association with nature is solidified (Ortner, 1974:74).

In looking at the physiological nature of man and woman, females were historically associated as the weaker or 'prey' of the species (Ortner, 1974:74). Many organs and physical features bear of no direct use to the individual and her own self sustenance, mainly associated with producing and nurturing children. These reproductive processes even hinder her from routine, and thus restricting her physical and social participation in some instances. During pregnancy much of the nutrients within her own body are channelled towards the foetus, thus

draining herself of resources. The process of childbirth itself is a purely natural process, though often dangerous to the mother, and contributes to the raw and natural associations of women. Thus a large percentage of a woman's life and functioning is compromised in order to bring forth new life, often at her own physical expense.

Since man has no biological way of creating, he seeks to implement his creativity in the artificial sense through symbols and meanings (Ortner, 1974:75). We find that cultural duties are historically associated with men and reproductive responsibilities with women as many household dynamics show (Plate 2.3) The product made by men in this circumstance has a longer lifespan in that it transcends generations and time. Wars and hunting have been declared as monumental and pivotal moments in man's

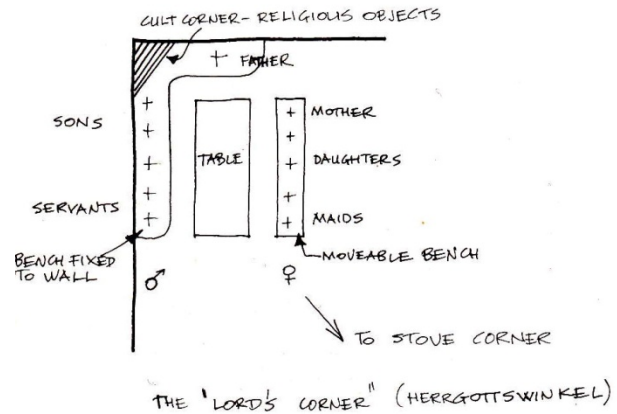


Plate 2.3. The typical European medieval dining room layout, showing clear orientation towards a cultural corner and hierarchal seating positions. (Rapoport, 1969:54)

history, notions of destruction take precedence over the sustenance and reproductive nature of women and the natural environment. Females are not exclusively restricted to the natural realm, as they too have human consciousness. Her involvement in traditions and rituals in recognition of man's achievements and victories perpetuate her acceptance of the cultural world and its mechanics. A woman finds herself being caught between nature and culture yet not as far transcended as man as to be on the same level of superiority according to Ortner (Ortner, 1974:76).

Woman is also inextricably bound to nature due to her physiological make-up. This also affects her social involvement in that culture has cemented the view that a woman's pivotal and prime role is reproduction. Most cultures view the relationship between infant and mother as a natural bond, one which should not be interfered with or rearranged to form an alternative. This bond and responsibility is the most prioritised function of a woman and as a result all her other undertakings are compromised and she is cast into the domestic sphere (Ortner, 1974:77). Woman's association with nature is again reinforced through her interaction with infants who are at the time closer to nature than to culture as they have been

untouched by human intervention and social processes. This association pertains to children as well. Children are not acknowledged as recognized members of society until they have reached an accepted level of cognitive functioning and social behaviour. In some cultures the process of initiation is used to serve as a threshold between a natural, young being and socially knowledgeable, culture literate individual. It is clear that children are seen as less civilized or cultured than adults and are classified into the natural sphere (Ortner, 1974:77).

This domestic and largely biological associated unit is often seen as an opposition to social and public sphere in which males dominate. Thus researchers have said that historically women and children are seen as a group with lower social value (Ortner, 1974:78). Since males lack a direct connection to children and infants they are seen as naturally the parent who advocates cultural thought, priority hierarchies and values. Women do however play an important role in the transfer of culture in the child's early stages of socialization, teaching them manners and socially accepted means of behaviour (Ortner, 1974:79). However at some point in most traditions, as the child gets older it is seen as imperative that a male figure finalizes the social conditions being taught, this is seen in schools where most kindergarten teachers are females and professors being male. We can thus see women's involvement in the replication and domination of culture over nature, however it only occurs as a secondary and inferior role when compared to that of men.

Children also form associations of their parents from an early age. They see the role their mother has in nurturing and providing support for their development. The relationship with their father is often an abstract one in that the father figure is seen to be at work or far away. This 'positional identification with their father' gives children the experience needed for when they enter adulthood and social world which is largely constructed from abstract processes (Ortner, 1974:82). Thus women played an important role of preparing their children in terms of introducing socially accepted norms of behaviour. This preliminary education process is vital for the continuity of culture to take place, it can only continue if each new generation of individuals in society are equipped with the same social preparation. It is therefore of great importance to culture's continuity to conserve and protect the valuable domestic unit. This is the reason for immense cultural hatred towards anything that seeks to challenge the domestic unit.

When compiling a list of conditions that will ultimately influence the household environment, Rapoport states that the following should be considered; basic needs, family, privacy, social intercourse and lastly, the position of women within the house (Rapoport, 1969:61). This direct acknowledgement of the physical location within the house is a method of patriarchy whereby women are seen as subordinate to men, as household layouts at the time demonstrated. Gender dynamics also perpetuated and enforced various activities among men and women. Activities occur in time as well as space and therefore it is important to understand that this creates various consequences.

The position of women within the households demonstrates many gender dynamics and socio – cultural conditions. These dynamics were subsequently manifested into the physical built environment. The settlement typologies of various Cameroon houses show how floor layouts varied in consideration of the relationship between man and women. In a monogamous marriage(Plate 2.4), the floor plan shows a more linear layout where the man is placed in a hierarchical position at the entrance and the space dedicated to women and children serves as the ‘heart’ of the plan. The position of the wife however also clearly displays that kitchen and granary responsibilities were placed exclusively on the woman. In a polygamous marriage (Plate 2.5), the husband remains close to the entry of the shed whilst the wives areas are adjacent to the kitchen (Rapoport, 1969:56).

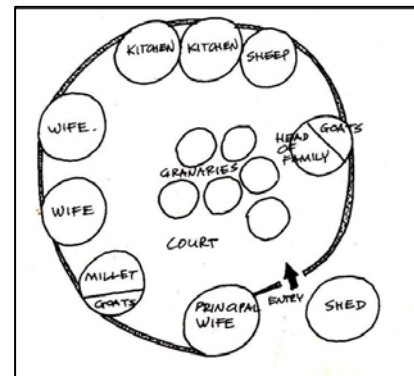


Plate 2.4 Monogamous Mofoufarm in Cameroon (Rapoport, 1969:56)

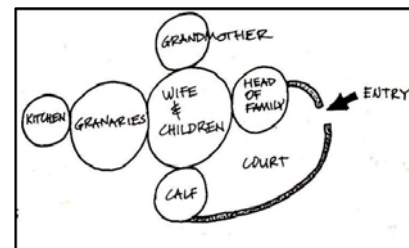


Plate 2.5 Polygamous Moundangfarm in Cameroon (Rapoport, 1969:56)

Conceptually this is an indication of how a patriarchal system can manifest itself within the built environment and simultaneously reinforce social principles restricting women. The Cameroon homesteads indicate that spatial layouts communicate gender role, hierarchy and power. These spaces are mechanics used to control the lifestyles and behavioural patterns of the women belonging to each tribe.

The polygamous Moudang farm (Plate 2.5) displays the various dynamics with regard to gender roles. The manner in which the male head of family is located at the front of the family reveals that he holds both power and control. Whilst he has prominent spacial access to both the interior of the house as well as the exterior, the grandmother and wife are contained within. This could be due to protective measures, whereby the safety of the women within the family is deemed important. This itself however also indicates that the women within the household are seen as possessions similar to the granaries and calf located towards the back of the space.

Spatial dynamics do not only reinforce and perpetuate gender roles in individual buildings, but broader settlement planning itself can act as a macro mechanism for further reinforcement of gender dynamics. Plate 2.6 shows the settlement of the Muslim town of Isphahan, whereby the physical location of houses combined with gender dynamics to marginalise women's social and public involvement, creating separate social spheres for men and women (Rapoport, 1969:73). Since women were culturally encouraged to perform private, domestic duties, their interaction with public spaces was minimal and as a result women were disconnected from any form of political power or social development

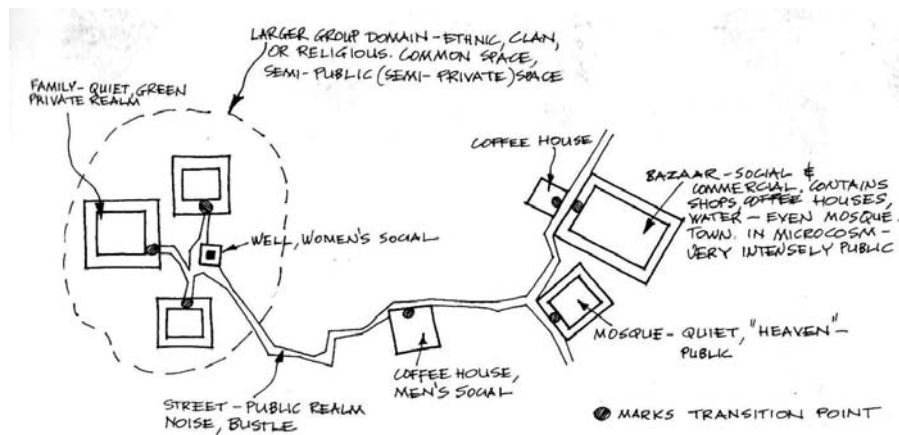


Plate 2.6 Diagrammatic analysis of gender dynamics in the Muslim city of Isphahan. (Rapoport, 1969:73)

## 2.4 WOMEN AND URBANISATION

Space is intricately linked to gender and human rights violations because it is composed of public and private constructs, culturally accepted behaviour and forms of power. Women's freedom of movement has been immensely restricted and as a result other rights such as the right to work has been compromised. The African nationalist ideology has been said to perpetuate the oppression of woman by creating an un supportive environment for women to advance in (Bay, 1982).

As has been established, gender roles saw the division of men to public spheres and women to private. Paravicini offers an interesting look at the accessibility of public space in relation to women. She has classified three possible categories which elaborate on this notion of accessibility to 'public space': from a political perspective, a meaning typical of liberal tradition and from a sociological perspective (Paravicini, 2003). The political perspective of public space was introduced by investigating political spheres in Greek society. Here the decision making elite were predominantly male and claimed the public sphere. This was embodied in the *Agora* (Plates, 2.7 and 2.8), the main city square where decisions on public goods were made, a political and physical symbol. The contrasting *Oikos* was the representation of the private sphere containing non-men, non-property holders and non-Greeks.



Plate 2.7. Artists impression of the Agora marketplace. (www.michellteachers.org)



Plate 2.8 Plan of Agora (www.greeceathensaegeaninfo.com)

This infrastructure was intentionally put in place to alienate women, slaves and foreigners from any form of political power and presence. This resulted in a social sphere where participants had the role of economic actors and had a poor impact on the political sphere.

Thus in political context, public space was not defined according to its physical attributes or social interaction, it was defined through differentials of power (Benhabib, 1998). The *Agora* was created through the process of major exclusions and infrastructure in ancient Greek planning was clearly based on associations of men and women and their roles.

In the liberal sense, public space is an environment where everyone is entitled to participate in activities. However in this perspective cultural constructs define the accessibility to public space. Public and private spheres are not just social constructs they are means of cultural classification and hierarchy, tools to give value and importance to certain elements and to weaken other less valued interests (Vachelli, 2005:7). Thus the private and public divide was historically used to alienate subordinate social groups. Subordinate groups then began to gradually form their own public spheres such as women's public groups and poor people's public groups. This of course contrasted with the original and male constructed bourgeois public platforms, resulting in conflict and inter-public interaction taking place. Due to the nature in which the liberal public asserts dominance an alternative public is needed. A powerful key factor is the integration of diversity which allows for the participation of different groups in a fragmented society, thus the importance of diversity and equal publics are defined (Vachelli, 2005:8).

Vachelli classifies the third method of accessibility into the public sphere as one of a physical nature, and thus encompasses the social meaning of public space. Public spaces within the urban fabric can be controlled through the use of panoptical controlled spaces of surveillance or free and easily accessible, comfortable spaces which are appropriated by a multitude of users. In modern practice the privatisation of space is largely connected to the idea of excluding perpetrators through established boundaries such as those employed by gated communities. Through an attempt to achieve safety, privatisation challenges urban space and encourages the social segregation of space which results in marginalisation of the poor into empty and disconnected spatial spheres (Vachelli, 2005:8). Now relegated to the outskirts of the city, poor individuals have no means of interacting with public space due to lack of transport and basic services and amenities. Therefore these social spaces have little to no use for its local society.

We thus note how the accessibility to public space is affected by economic variables concerning classifications of gender, class and race. Therefore gender which incorporates classification such as sex and race is a massive informer of the organisation of cities. This dynamic shows that freedom and quality of life for some is at the expense and alienation of others who are restrained from participating in the public realm. Capitalism and gendered patriarchy are closely linked in the formation and development of society and spaces (Vachelli, 2005:9).

According to Haydon, if men and women are equal members of society then the environments in which they live should reflect that. The design and experience of a place should not perpetuate the long inaccurate principle that ‘a woman’s place is in the home.’

This overused phrase has defined housing schemes and urban space as a Victorian model of public and private life which perpetuates the prevailing attitude towards woman (Haydon,1986:109). This attitude advocates the notion of female passivity in the domestic setting and male dominance in the public setting. This stipulates that decent, law abiding women were in their kitchens



Plate 2.9. An artists impression of the dynamic between men and women showing body language of domination and subordination. (Haydon, 1986:211)

accompanied by their husbands instead of being out on the streets or going to places where men went. This created the concept that females belonged under the ownership of males and that they should show this commitment by staying securely in his domain, whether it be their father or husband. This indirectly implied that any woman out on the public street not in the company of a male was no *one* man’s property and therefore she was *every* man’s property (Plate 2.9). This estranged deduction was the cause of much harassment and violation towards women in the public and working realm. In the contemporary world women represent a significant percentage of the economy but this spatial stereotype and association remains. When women are alone or with their children these places become no-go zones or spaces where their safety is compromised or abused. Men are not isolated from these problems, as husbands and fathers of these women they indirectly suffer as well. It is ironic

then that man and society continues to build these spaces and perpetuate the behaviour system which ultimately cripples development. This gives rise to the double standard notion of women. It was expected that women experienced public spaces in the same way men do, when in their company, or that they do not experience it at all due to the fact they are at home. If the domestic world is seen as a distinctly separate domain from the public realm then, according to Haydon, women can always be sent back to it and men will have justification for the exclusion of women (Haydon, 1986:212).

From the points already made concerning the gendered accessibility of space it is clear that the public urban spaces of cities construct allowances and restrictions to certain groups. This is a worldwide dilemma and even cripples first world societies. In the 1980s Germany's transport routes were solely connecting peripheries to the city centre. This meant that the only people who would then be eligible to use this infrastructure would be the commuter and employed individual, the majority of which were male. In the late 1970s the country recognised the relationship between gender and urban spaces and endorsed initiatives to promote the idea of non-sexist cities. This attempted to blur the distinction between private and public and expose private mistreatment and behaviour. Various feminist groups asserted that much of masculine dominating power was not only evident in social and economic constructs but in the built environment as well (Vachelli, 2005:9). They stated that social constructs of domestic associations and gender roles restricted women and created an obstacle in their journey to independence .

Urbanisation also contained various other mechanisms and dynamics which perpetuated gender roles and stigmas regarding women's place in society. The film and television industry is a pivotal factor in influencing behaviour and cultural stereotypes. Advertising campaigns used female models to promote work and female roles often enforced domestic associations (Plate 2.10). School curriculums only allowed domestic subjects such as nursing and embroidery if none at all. The effects of gender dynamics and social inequality toward women were amplified through these processes (Haydon, 1982:10).



Plate 2.10 A vintage advertisement for vitamins.([www.weburbanist.com/2010/05/18/old-school-vintage-ads](http://www.weburbanist.com/2010/05/18/old-school-vintage-ads))

Socio cultural contexts could also be held responsible for crime against women in various countries. The current increase in crimes against women validate that despite various laws advocating gender equality there is still a massive social dilemma with regard to the safety of women. There are various conditions which can be said to contribute to instigating violence against women. The majority of these factors arise out of socio-cultural contexts. These contexts are systems composed of different yet interrelated components such as social norms, stereotypes gender roles and the built environment.

Social and gender dynamics often perpetuate the view that a woman is merely an object (Haydon:1986), thus stripping her of human dignity, abuse and harassment are but a few acts which result from these mechanisms. The abuse of women is a large problem in many societies. Domestic violence has an immense impact on the health of women (Bradley:1990), aside from physical injuries, the psychological scars are often more damaging in the long term. Psychosomatic disorders impact the overall quality of life among victims. Depression and post traumatic stress disorder are but a few unhealthy impacts on the victim (Koss et al:1991). As a means of coping with these situations many women resort to activities such as alcohol and substance abuse. Extreme cases even lead to self infliction and suicide. In order to cope and recover from abuse many women withdraw from various social activities, including work which further impacts financial capabilities (Carillo:1992).

## **2.5 ASSOCIATIONS OF WOMEN IN SOUTH AFRICA**

It is at this point of interest to discover the way in which influential and powerful women have been celebrated within architectural and related discourses such as public commemorative art. Although public art is predominantly analysed in terms of fine art the artworks are an embodiment of heritage which is a concept continually defined and implemented in architecture. Heritage itself is a fundamental component which is linked to notions such as identity, culture and self perception. It is therefore beneficial to investigate the methods in which people have symbolically represented women as possible meanings and allegories could be found.

Memorials and tributes within public art and the environment often seek to create awareness, invoke remembrance and also ensure continuity of a set of meanings. It is thus imperative to convey the correct meaning as it will be the subject of public observation. To ensure this many designers have formed distinct perspectives regarding the manner in which women should be represented and honoured (Marschall, 2010:262). Some prefer to deliberately reinvent the way in which people are reflected in memorials in order to not perpetuate previous patriarchal stereotypes and roles by reconfiguring the visual aesthetic of monuments. These examples, which have sought to completely reinvent the conventions of tributes and memorials, do however ultimately encounter the problem of lost meaning or monuments which fail to communicate notions of integrity and respect.

The Post-colonial representation of women in the forms of tributaries, memorials and sculptures is an important avenue of information which must be investigated to gain further insight as to how influential women have been honoured and represented thus far in South Africa. After the apartheid regime and 1994 democratic elections, the post-apartheid government sought to claim back its own national identity through the implementation of a new urban fabric which reflected the country's identity, values and beliefs. The previous urban landscape was largely biased towards the thoughts and ideas of earlier male power forms and as a result many existing dedications and memorials were dedicated to significant male social and political figures. Many of the following implementations offer views on how women in a post-colonial region may be represented through symbolic means. As memorials and sculptures ultimately convey a series of meanings it is important to understand what notions regarding women the authors wished to attach to their work. As architecture involves visual cues it is of interest to see how individuals have approached the task of visually honouring influential and powerful women. It is also of interest to investigate how monuments dedicated to women may be different to existing tributes to male honoraries as well as determining if any existing stereotypes have been perpetuated by symbolic representations (Marschall, 2010:263).

As public art is influenced by the socio-political context in which it arises it becomes a cultural artefact with an intended purpose such as reconciliation, nation-building and transformation (Marschall, 2010:262). In terms of monuments and sculptures, artists have a tight boundary in terms of aesthetics and as such many predetermined strategies have been found. In terms of memorials and statues, certain materials and symbolic coding has resulted

in set condition which designers work within. As an example bronze sculptures have been widely accepted as a material representative of honour, integrity and stability. Gender based approaches to the concept of nation building has become an increasingly popular exercise as the government aims to create a new identity based on values of equality and freedom. Traditional and historic representations of women pertained largely to the female form as opposed to the meanings and accomplishments which were seen in the women's life. This romanticised interpretation perpetuates stereotypes and does not change the stigma which has been previously attached to women regarding their role in society (Johnson, 1995:57).

Historically women's contributions to society are largely commemorated in terms of sacrifice, a role which coincides with traditional stereotypes of women. (Marschall, 2010:263). One of the earliest and largest monuments to women in South Africa is representative of such an event, the National Women's Monument outside the Anglo Boer War Museum. The Anglo-Boer war of South Africa was a significant event in the country's history and has been commemorated by the Anglo Boer War Museum. Visitors and tourists gain insight into the war through exhibits and art collections. The journey continues out

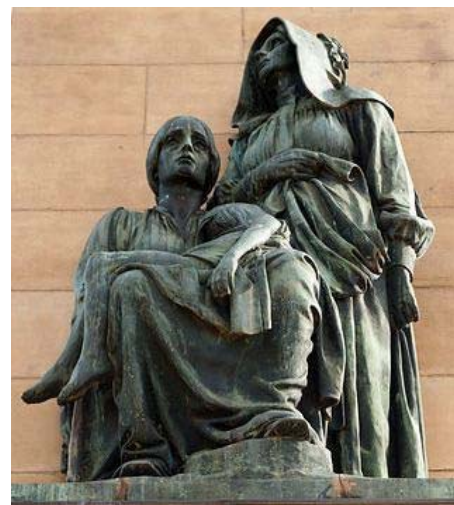


Plate 2.11. The bronze figure representing women mourning a dying child. This represents women as vulnerable individuals. (www.travelblog.portfoliocollection.com)

onto the museum grounds where many artefacts and sculptures pay tribute to iconic figures and moments in history. Soon after the Boer War a conference took place whereby the museum's planning was initiated and it was established that the time had come to 'erect a monument on South African soil to the glorious memory of the mothers, women and children who had passed away or suffered in the concentration camps. The memorial was to be funded largely through contributions from the public and became a matter of public importance when funds were brought in from those in a state of poverty. The physical representation of the memorial is achieved through the use of a large obelisk surrounded by two semi-circular circles on either side and was designed by a local architect. In front of the plinth there is a bronze sculpture which depicts two mourning women and a dying child from the Springfontein camp. Although past events should be remembered as a component of heritage the monument depicts women in a rather vulnerable light, physically conveying submissive body language of women and visually displaying women in a sacrificial role

The National Monument to Women in South Africa marked the post-apartheid perspective of symbolising women in the country. Not only does the structure symbolise the sacrifices made by women but it contains an embedded symbol of political activism (Marschall, 2010:263). This monument is a celebration of the women who collectively suffered and persevered through hardship in order to protect their societies and progress towards democracy. Commissioned by



Plate 2.12 The multimedia monument commemorating the protesting women who chanted “Wathint’ abafaziwathint’ imbokodo” .which translates to “Strike the women, strike the rock.” (www.rememberoursisterseverywhere.com)

the post-apartheid government, the design of the monument was performed by an artist and an architect, Wilma Cruise and Marcus Holmes respectively. The monument is in the form of a multi media installation which combines a physical object, a sound clip of whispering choruses and an inscription. The monument commemorates the protest of twenty thousand women at the Union Buildings against the Pass laws on women on the ninth of August, 1956. The women who had participated had come from different cultures, traditions, ethnicity and political stance. The protestors were united in their goal to end the apartheid rule and submitted bundles of protest letters to the Prime Minister. The women in the protest calmly chanted, “Wathint’ abafaziwathint’ imbokodo” which translates to “Strike the women, strike the rock.” This chant is the symbolic meaning which the monument communicates to those who interact with it. The project was unveiled at the union buildings by the South African President Thabo Mbeki on Women’s Day in 2002 and marked a historic day in the history of the country.

This example is one out of the handful of government initiated projects which attempt to represent and honour women through the symbolic fabric of South Africa. Upliftment of women’s associated involvement in society is of a national concern as the country strives towards goals of inclusivity, representation of minority groups and marginalized people. Despite this the cultural landscape of the country still has a few minor monument such as the Monument to Women in South Africa. This symbolic representation is however a step forward in the direction of honouring women in light of strength and ability.

The Wall of Hope in Durban's Gugu Dlamini park is dedicated to one of the most influential women in the country, Gugu Dlamini, an individual who unconditionally helped create awareness of HIV/Aids in local communities. Dlamini was gruesomely assaulted by a mob which resulted in her death after she publicly announced her positive HIV status. On the 1 December 2000, International World Aids Day, Durban's Central Park was renamed GuguDlamini Park

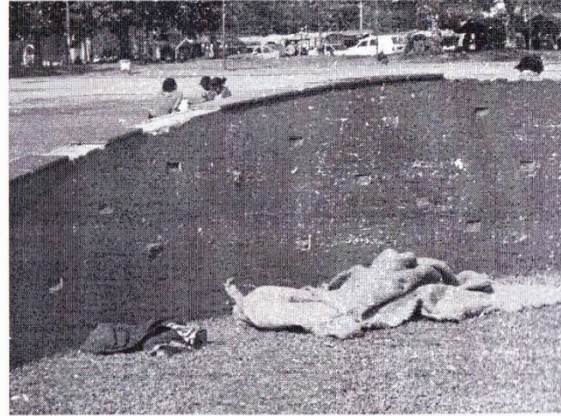


Plate 2.13. The current derelict condition of the Wall of Hope in GuguDlaminipark conveys a different message than initially intended. The vandalism of the monument hints at society's respect towards memorials for women. (Marschall, 2010, 271)

in honour of the heroin. As a focal point within the park, a physical memorial was to be constructed to communicate the tribute to Dlamini. The designers of the monument deliberately sought to reinvent the manner in which a monument is articulated. A special precinct in honour of the fallen heroin was chosen as a solution as opposed to an isolated monument. An interactive space could convey more meaning than a visual object and the designers attempted to work with the natural landscape as opposed to creating a distinguished identity of a monument which is separate to its surroundings (Marschall, 2010:264). Within this space a subtle raised slice of the landscape represents a memorial to Dlamini. The symmetrical curvilinear wall surrounds a mosaic space and includes a skylight which illuminates the parking below communicates a spiritual meaning when light passes through. In current times the memorial is in an unfortunate and derelict condition. This is due to vandalism and theft of the materials used to create the structure. This broken dedication can also be seen to convey a different meaning to the initial one and is quite ironic. The memorial intended to convey integrity to the iconic women yet the destruction of her memorial can be a metaphor of the assault and ultimate death of Dlamini. It can thus be seen that they narrative which is conveyed by the current monument exhibits notions of disrespect and defacement towards a women. Although vandalism of monuments are common regardless of the monument honouring a man or woman, it is of concern that one of Durban's most iconic landmarks is being defaced and its symbolic undertones being rewritten. The 'wall of hope' has become a beacon which could be seen to convey ambivalence and exhibit a corrupted message (Marschall, 2010:265).

## 2.6 CONCLUSION

This chapter investigates the social and cultural mechanisms which have historically and currently restricted the involvement of women within society. Beginning with the cultural associations of women, the study has revealed that many cultures have historically held definitive roles for women. The majority of cultures have allocated the private sphere of domestic activity to women, largely because of reproductive ability and have reserved the public domain for men. As development, growth and power is found in the public domain, a restrictive cycle ensued amongst many cultures whereby women were unable to socially and physically gain access to public infrastructure and authority. These gender based social dynamics were perpetuated exponentially through the process of urbanisation, where the media, workplace and institutional processes continued to restrict and reform women's place in society. Secondary occupations and education curriculums perpetuated the perceived role of woman as unequal to man and belonging in a domesticated role. Gender dynamics present in public spaces reinforce the view that a woman is 'public property'

In the South African context similar problems and consequences are discovered. Colonialism, western views regarding women and patriarchy are the preliminary social systems which have created beliefs regarding the position of women within society. These views and beliefs, held by the majority of the ruling elite of the country during the Apartheid era, have subsequently been embodied in the built environment in terms of the functionality and design of public environments. The resultant utilitarian and anonymous environment, on both a social and physical level, is one which deters the involvement and interaction of women. The representation of women in South Africa through various memorials and representation have also shown the irreplaceable role which influential women have held in improving society and striving for freedom and democracy.

Socio cultural contexts could also be held responsible for crime against women. The current increase in crimes against women validate that despite various laws advocating gender equality there is still a massive social dilemma with regard to the safety of women. There are various conditions which can be said to contribute to instigating violence against women. The majority of these factors arise out of socio-cultural contexts.

## CHAPTER 3: CONDITIONS SUPPORTIVE OF WOMEN INFLUENCING THE BUILT ENVIRONMENT

### 3.1 INTRODUCTION

This chapter explores the way in which environments may be influenced by issues regarding the supportiveness of women. Built environments can be supportive of women in various ways. Small-scale, direct physical supportiveness, would involve responding to activities and the lifestyles of women such as the various rooms and spaces within a women's clinic and how they directly engage with women. Conditions which address issues faced by women, are however, not exclusively found in women-related typologies such as clinics or shelters for women. Supportiveness on a larger, less direct scale refers to the way in which built environments in general respond to the needs and issues faced by women. These different yet interrelated layers will be discussed in this chapter and past and present spaces will be used to demonstrate the various conditions.

### 3.2 FUNCTIONALITY

With regard to buildings which are directly supportive of women, there are various design criteria and spatial programming considerations which take place. Most of these are a direct response to the unique healthcare requirements of women. The Sekii Womens Clinic (Plate 3.1) is an example of a building which houses functions that exclusively support



Plate 3.1 The Sekii Womens Clinic. (Pollock, 2002:136)

women. In this case the process of childbirth is the central activity which needs to be supported, with other associated or derived activities catered for as well. The building creates an environment for vulnerable women, who respond both functionally and abstractly to this. The architect aimed at creating a setting which is protective but not isolating. To achieve this, the architect sought to manifest a metaphorical transition within the built fabric; a vertical

transition between the real world and a sacred one (Pollock, 2002:136). Structurally this meant lifting all the maternity functions to the first floor, where mothers could welcome their newborn babies in a calm, special, meaningful space.

The journey for women who first enter the building begins on the ground floor (Plate 3.2), where the clinic is situated. Waiting room areas, exam rooms and x – ray rooms are located on one end of the plan and medical offices and informal garden areas on the other end. The entire plan of the ground floor is enclosed in glass walls, gently shielding the users within yet still allowing interaction to occur between the interior and exterior. The second floor contains the maternity wards where vulnerable



Plate 3.2 The first floor plan (top) and ground floor plan of the women's clinic. (Pollock, 2002:137)

women are lifted up into a protective sanctuary. Visually, this occurs through robust masses which appear to hover in the air. This use of the vertical metaphor, links with the ideas put forth by Norberg-Schulz, namely that the vertical dimension of space is representative of existential meanings and abstractions (Norberg-Schulz, 1974:433). The second floor also includes antenatal, delivery and prenatal amenities which operate through all hours of the day (Pollock, 2002:137).

The architect did, however, aim to create a degree of separation between the mothers within the maternity ward and the adjacent urban highway. This was achieved through orientation whereby the building faces the street diagonally so that women feel safe from the intimidating exterior atmosphere (Pollock, 2002:138).

### 3.3 ACCESSIBILITY AND MOVEMENT

Access to a building occurs on many levels and each needs to be investigated thoroughly if a building is to be functional towards women. The ability for women to access a space is crucial and is reliant on a number of things. Initial transportation to a public space is the first and foremost issue as women are adamant about using different means of transport especially in relation to time. Women avoid public transport and spaces during the night due to safety risks and this pushes all their daily routines into hours of the day where areas are completely visible. Women with young children are at an even further risk and feel more vulnerable (Ostergaard 1992:95).

Physical accessibility accounts for the dimensions and distance which compose access routes and thresholds. Thresholds that are too small are claustrophobic and intense, whereas too large of a threshold can be daunting or imposing. The way in which people access the space should be of a pleasant nature, where building elements such as steps or walkways take cognisance of the ergonomics of man, woman and child. This can be understood as the behavioural fit between

spaces and individuals (Mthethwa, 2001:22) Ramps do not only take cognisance of disabled individuals, but also address infants transported in prams. Most applications of ramps in architecture are seen as isolated, separate elements, and this could perpetuate the idea of segregating people with special needs from the general public. The exclusion of ramps leads to dangerous behaviour as illustrated by Plate 3.3. The ramps implemented in Robson Square, Vancouver, form part of the large public stairway and thus suggests that there is no separation present between disabled individuals, infants in prams and any other individual (Plate 3.4).



Plate 3.3 A woman pulling a pram up a staircase.  
(Mulholland, E [www.telegraph.co.uk/news/uknew/](http://www.telegraph.co.uk/news/uknew/))



Plate 3.4 A Ramp integral to staircase.  
([www.flickr.com/photos/borkazoid/4202740785](http://www.flickr.com/photos/borkazoid/4202740785))

### 3.4 DEMOCRATIC SPACES

Much of the social and spatial challenges experienced by women, stem from aspects of gender and social inequality. A predominant perspective with regard to addressing this form of inequality in planning, is that of democratic architecture. Democratic environments, which

seek to move away from rigid and utilitarian ways of thinking and meanings, have also shown an informal and dynamic approach to the physical treatment of spaces. Wright speaks about organic architecture and democracy in terms of freedom whereby the individual within a space should have the ability to make choices and exert free will (Wright, 1945:121).

Curvilinear walls, facades and interior spaces of the Guggenheim museum resulted in internal circulation of a more free nature, without any rigid authoritarian boundaries or set movement patterns (Plate 3.5). The idea of embodying democracy is particularly evident in public and civic buildings in South Africa (Noble, 2004:40). The Constitutional Court in Johannesburg utilises democracy as a major theme, and this has informed the design of various elements within the building.

An example is the dynamic and random sloping of the columns within the foyer, communicating diversity and freedom (Plate 3.6). The forms found within the Northern Province Legislative complex, embody notions of diversity, freedom and informality (Plate 3.7).. This informality is also found within the spaces of the building as the plan exudes notions of freedom, and challenges segregation through the use of non-linear forms



Plate 3.5 The Guggenheim Museum ([www.nadaad.com/inspiration-day-21-frank-lloyd-wright](http://www.nadaad.com/inspiration-day-21-frank-lloyd-wright))

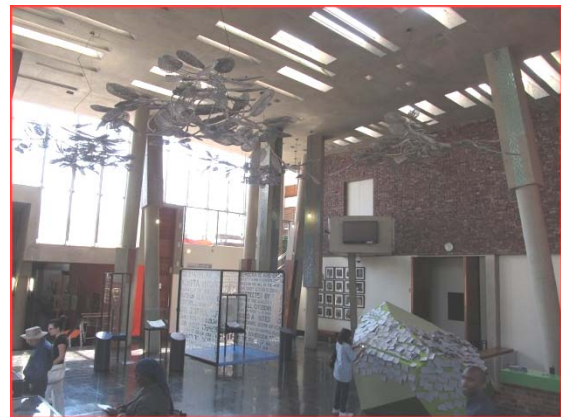


Plate 3.6 The slanted columns in the foyer of the Constitutional court. ([www.allatsea.co.za/mygallery/jhb2/concourt03.jpg](http://www.allatsea.co.za/mygallery/jhb2/concourt03.jpg))



Plate 3.7 The Northern Cape Legislature Building ([www.lfsarchitects.com](http://www.lfsarchitects.com))

### 3.5 MEANINGFUL FORM

Urbanisation utilised space to order and divide in an attempt to control and convey status. Spatial hierarchies were formed using architectural modes of scale, inclusion and exclusion, and quality of environment and physical location. These mass-produced divisional spaces create utilitarian atmospheres thereby creating unquestionable boundaries that reinforce social stigmas and discrimination, in this case restricting women. These are spaces which do not relate to women, as women desire an engaging nurturing environment which responds to their lifestyles and behaviour. (Shiva, 1988:39)

The Chicago Women's Park and Gardens is a public precinct in New York which seeks to celebrate the women in its city and to convey meaning through strategic composition and form (Plate 3.4). The concept behind the park was that it was to be an embodiment of women around the world. The small scale of the park evokes the feeling of intimacy, and the densely vegetated borders soften its edge with the street. The winding pathway on the perimeter of the park is representative of a woman, as she "moves in and out of traditional boundaries and roles through the course of her life"(Chicago Park District, 2012)



Plate 3.8: The curving pathways in the Chicago Women's Park and Garden contain symbolism  
(<http://www.chicagoparkdistrict.com/parks/Chicago-Womens-Park-and-Gardens>)

This unrestricted informal approach to form is a recurring factor when considering a supportive place for women. Rigid spaces created by urbanisation generated defined boundaries and edges, which placed individuals firmly in one region or another (Wasserman, 2012:9). This placement is often in terms of hierarchy which is commonly intimidating and demeaning. Lynch speaks of an 'edge' as a linear element which functions as a barrier to form distinction(Lynch, 1960:47). This brings into mind Cartesian elements which seek to rationalize, order and classify elements. Natural settings and forms, although containing separate elements, do not contain rigid and unquestionable dividing elements but instead provide harmonious forms which complement each other and contain a continuous dialogue. Notions of inclusion, exclusion and Cartesian points are absent in nature (Shiva, 1988:40)

The female principle of *Prakriti* in Vedic ideology is synonymous with Mother Nature, the powerful existential force which creates both the living and non-living. Although the non-living elements of the world are inanimate, they contain a hidden consciousness (Shiva, 1988:41)

Hadid, a prominent female architect within the architectural world, searches to convey the informality and raw magnificence of nature through her architecture. Boundaries and set typologies embody rigidity and division and Hadid aims to challenge those notions through the articulations of forms which blur the distinctions of planes, references and organisational devices. The resultant architecture is not one which divides existence into spaces but connects all spaces into one resultant world which distinguishes spaces yet maintains an overall connection. In her design for the Heydar Aliyev Culture Centre (Plate 3.9 – 3.11). Hadid makes use of informal sweeping forms which question the rigid and structured forms typical of modernisation. The floors swivel to become walls which in turn becomes a roof, the centre contains functional spaces yet does not dominate nor seek to transcend or directly distinguish itself from the environment. The swooping forms are also a reflection of the users of the space and their unrestricted lifestyles and character (Plate 3.4).

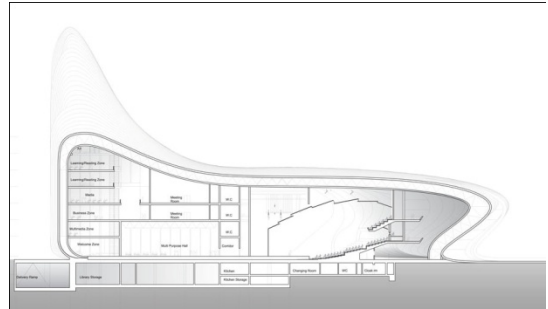


Plate 3.9: Section of the HeydarAliyev Culture Centre. ([www.zaha-hadid.com/architecture](http://www.zaha-hadid.com/architecture))

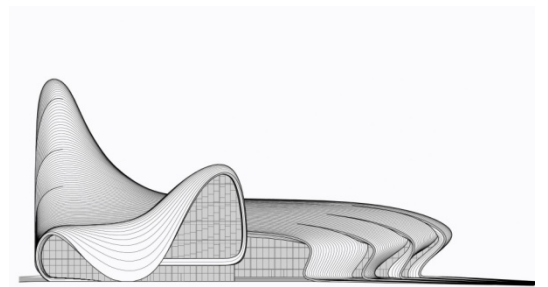


Plate 3.10 Elevation of the HeydarAliyevCulture Centre ([www.zaha-hadid.com/architecture](http://www.zaha-hadid.com/architecture))

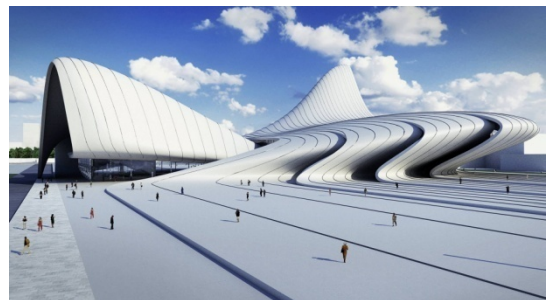


Plate 3.11 The curvilinear forms which form floors, walls and ceilings. ([www.zaha-hadid.com/architecture](http://www.zaha-hadid.com/architecture))

This informal, organic, approach is found within spaces supportive towards women. The Cha Women's Hospital utilises natural materials and organic forms to create a passive environment where in women may interact comfortably. The building uses a design motif of simple forms and natural elements, both on the interior and the exterior, to provide a natural interface in which to interact. The flowing forms seek to symbolise connection between the women and their families. Open areas allow women and other users to directly interact with nature and to connect with their surroundings (Plate 3.12).

The 'glass curtain' wall contains a layered and informal design language which gently creates a transparent sheet of protection for the women within, whilst still connecting them to the environment outside. The glass facade itself (Plate 3.13), mediates the intensity of light entering the building through glass panels of varying opacity, creating a dynamic effect on the interior space and add atmosphere and character. This characteristic of uninhibited natural elements is a crucial element in the creation of genius loci (Norberg-Shulz, 1980:69)



Plate 3.12 The curvilinear aesthetic treatment of the CHA Women and Children's hospital ([www.architectureweek.com/2008/0917](http://www.architectureweek.com/2008/0917))



Plate 3.13 The street facade and entrance. ([www.architectureweek.com/2008/0919](http://www.architectureweek.com/2008/0919))

### 3.6 PLANNING AND LAYOUT

The World Village of Women Sports Centre is a proposal put forth that is expected to act as a passive and natural gathering area where individuals have access to research, training and education regarding the development of women's sports. The project consists of a series of land massed buildings of varied sizes which are connected through pedestrian pathways (Plate 3.14). The building, which is deemed to be the first of its kind within the area, is to serve as a new regional landmark and is to be situated in the centre of Malmo in Sweden. The project was chosen as a winner in the competition as it demonstrated a solution which was tailored to the needs of women (Young, 2009:1). The proposal aspires to be a sanctuary containing an unconstrained atmosphere and a feeling of well-being, forming a town within a town as such. The design creates a connection between residential and neighbourhood qualities and functional services. Due to the variety of massed buildings, the project is to be understood as a village rather than one colossal development, utilising a plethora of public spaces and common gardens (Plate 3.15). The sloping form of the building is reminiscent of houses on a hill and thus contributes to the intended village motif. The remaining negative or void spaces form their own streets which bring forth and appropriate a medieval downtown atmosphere. It is here where the different roles of human life come into existence among each other, people working, living and utilising the environment. These 'streets' link up to the adjacent roads that connect pedestrians from the exterior to the interior facilities of the precinct (Young, 2009:1).



Plate 3.14: A perspective of the World Village of Women Sports Centre showing its context and connective pathways.( [www.womensportvillage.com](http://www.womensportvillage.com))



Plate 3.15 The building allows for passive interaction to occur on many direct and indirect levels. ([www.womensportvillage.com](http://www.womensportvillage.com))

### 3.7 SAFETY

Dame, a researcher of the construction of safe spaces for women, states that, an individual's experience of an environment is composed of interrelated factors such as the physical environment and the social context. These factors influence each other and either perpetuate concerns for vulnerability, or promote passive interaction with an individual's environment. Spatial dynamics in architectural planning function simultaneously with various social and cultural factors. Thus associations of the character of built environments could ignite social stigmas of the expected behaviour within that space, often bringing awareness to harassment towards women (Dame, 2001:14).

The aspect of security is crucial to civic space. By nature, public spaces are platforms whereby observation, spectatorship and exhibitionism naturally occur. However when implemented in an insensitive manner, mechanics of power are often put into place. This allows individuals in one space to have spatial-related advantages over and crimes are given potential platforms in which to occur (Crowe, 2000). Women understand this, and the fear of a sexual attack warn her not to place her body in that situation at all, thus leading to a restrained use of public spaces, especially when alone or under poor visibility conditions. Thus, women's freedom of movement is compromised. Spaces are often symbolic of certain characteristics which are identified as dangerous, or prone to be catalysts for harassment. Unsafe spaces alienate women, and as a result women avoid these places, often ultimately impairing their movement, social involvement and work potential (Ostergaard, 1992:104)

The presence of mixed – uses within the civic space's context, allows for continuous activities and more people, therefore more natural surveillance can occur. This is commonly referred to as 'defensible space', where visibility and permeability of urban space is necessary in providing a sense of security (Wekerle and Whitman, 1995). Confined areas and visual gaps must be avoided in civic spaces. Another factor which contributes to the concept of security is the image of the space. The aesthetic value and legibility of the civic space is very important in terms of creating a feeling of security. Spaces which are derelict, not maintained, filled with litter and graffiti, discourage women (Dame, 2001:14)

According to a study done on civic spaces, activity was found to be discouraged among women and children by poor lighting and footpaths, and an assumed lack of safety from both

crime and accidents. The issue of safety, both perceived and actual, show that these are vital conditions if walking is to be an encouraged form of movement. Women are also hesitant about long waiting periods and will not loiter around places which they are uncertain of. This aspect validates why some women avoid travelling. Long waiting times leaves one feeling vulnerable and uncertain in a place of limited activity (Haydon, 1986:216)

Women's safety audits are general surveys which seek to question women within specific areas as to what aspects of their environments intimidate them. Popular responses pertained to visibility conditions and physical amenities within spaces which allow for passive interaction where women and children may not hurt themselves. An improvement of visual stimuli include improvement of public signage, maintenance of spaces, transparent bus shelters and the removal from old and abandoned cars from parking lots. Handrails are desired along bridges over highways during obstructive weather conditions such as fog. Women require the landscape to be strategically designed so as not to obscure visibility and access (Dame, 2008:36)



Plate 3.16 Transparent bus shelter.  
(<http://p.globalsources.com/IMAGES/PDT/B1057019618/Bus-Shelters.jpg>)

The advantages of natural surveillance have been accepted by many architects as a means of increasing safety. Space syntax theories utilise isovist graphs to show the field of site in relation to one specific viewer and their environment (Plate 3.17). The various places at which the viewer is situated, will result in more or less visibility in relation to any obstructions. The more people present within a space, the safer it is as more people are aware of what is occurring in different places (Hillier, 1999:142).

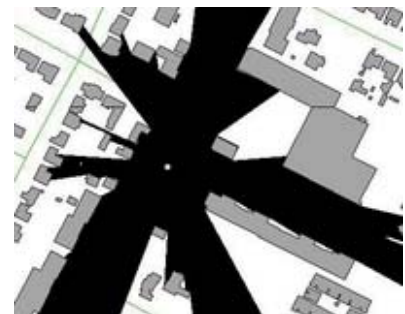


Plate 3.17 A 360 degree isovist visibility diagram showing the area of sight in relation to viewer and environment. ([www.lindaheard.com/streetwalker/theory](http://www.lindaheard.com/streetwalker/theory))

### 3.8 HUMAN SCALE

Research indicates that strategic scale of the environment is conducive to reducing feelings of vulnerability, a key social issue with regard to women. Humans experience their environment through their physical and sensory capabilities. A building which is designed sensitively will allow for the ease of physical interaction by its users. Men and women have subtle differences in their physical experiences of space due to their different anatomical qualities, a quality space needs to be informed by this (Wasserman, 2012:18). Successful environments convey a comfortable scale where steps, railings, seating, openings and walking distances are designed with the user in mind (Plate 3.18).

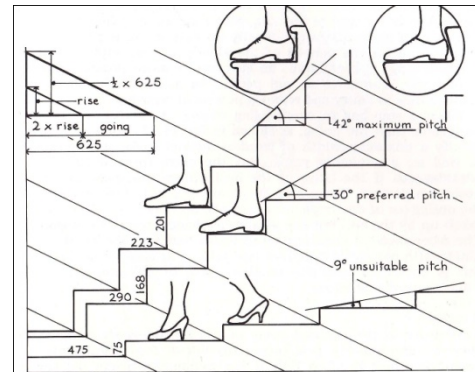


Plate 3.18. The scale of steps with regard to men and women and footwear. (Sinnot, 1985:137)

Another more subtle manner in which humans experience their environments is through their sensory capabilities. The way in which a person perceives an environment plays a pivotal role in their experience (Norberg-Schulz, 1980). The scale of the built environment in relation to man and woman is crucial in creating an enjoyable and comfortable setting. People find environments with human proportions more interactive and inviting (Plate 3.19). Humans have a natural tendency to measure things against themselves, therefore in designing an environment for women their vulnerability needs to be taken into account. This vulnerability is also due to the fact that many women are responsible for guarding and taking care of their children, thus environments need to

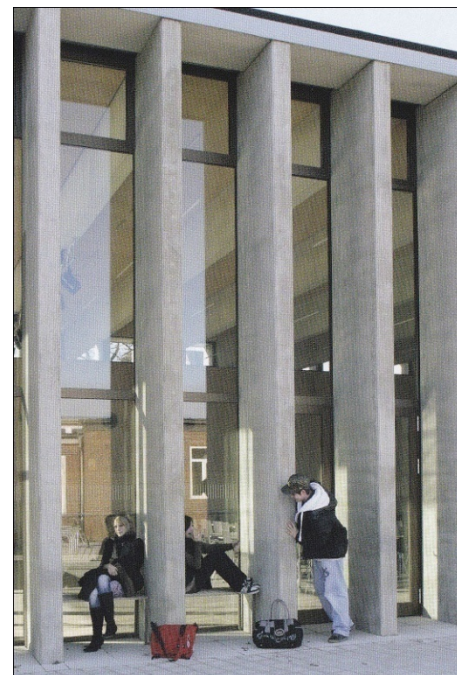


Plate 3.19 Human scale elements encourage human interaction and feelings of either comfort or vulnerability. (www.despangarchitekten.com)

pleasurable and not intimidating for women and children (Nager et al 1979). Large scale elements in buildings can overwhelm them and they might feel threatened. Monumental scale, when used, should be done so to evoke feelings of awe, inspiration and integrity and

not so as to dwarf the individual. This can be accomplished by subdividing large elements into smaller sub-elements which are more relatable to human proportions.

The use of scale in particular, carries with it many spatial dynamics and associations. Notions of hierarchy, order and control are all associated with monolithic and overbearing forms. Proportions of spaces should take care so as not to be stressful to the user. There should be adequate spacing between buildings so as to ensure privacy, sunshine and natural lighting. Passages and paths in particular are inhospitable when proportions are too small and deter women from using them, as many are only wide enough for one or two individuals to cross at a time, compromising personal space (Dame, 2001:14). Vulnerable individuals relate to environments which communicate a passive narrative to them therefore strategic parts of buildings need to employ, to a certain degree, the concept of intimate scale. Here the closeness of elements and walls evoke feelings of security, protection and privacy.

### 3.9 CONCLUSION

The present chapter has looked into the attributes of environments which have been socially and physically supportive towards women. Regarding the broader social inequality issue towards women, an investigation into form and spatial planning revealed that rigid and organisational aesthetics controlled and reinforced perceptions and social behaviour such as norms regarding women's behaviour and their role in society. A solution was to redefine the manner in which spaces are formed through the use of curvilinear, informal and passive design characteristics. The key theory of organic architecture revealed that a democratic environment involved the ability to grant the user control of the space and allow him or her to make choices regarding movement and interaction. This approach has been found to be a key driving force behind public and civic architecture in the postcolonial and post apartheid era, fostering a free and democratic identity.

The chapter revealed that the affects of gender inequality extends to an immediate scale where environments exist as platforms, where behavioural patterns and social customs regarding gender dynamics are performed and perpetuated. The previous chapter explained the social dynamics behind the association of women within public space, this chapter elaborates on how a woman may associate behaviour, often criminal, within various spaces should they contain visual cues characteristic of that behaviour. Harassment and the infringement of personal space towards women have been established as social problems, women are well aware and conscious of this issue. Vulnerability is induced by anonymous spaces that lack identity, are not functional, and do not directly engage with users. The study thus revealed in order to reduce the vulnerability felt by women within public space, a welcoming, functional, meaningful and safe interface is needed to form comfortable associations. This safe and meaningful application of design is found to be particularly important in buildings designed exclusively towards supporting females such as women's clinics and hospitals, thus reinforcing the connection between meaningful spaces and the social well-being of women.

## CHAPTER 4: ARCHITECTURE SUPPORTING WOMEN

### 4.1 THE UBUNTU CENTRE

#### 4.1.1 BACKGROUND

The Ubuntu centre is an initiative which provides facilities for a healthcare and education fund in the precinct of Zwide. The Ubuntu Education Fund Foundation, needed facilities to cater for the various non-profit services that they offer, such as, HIV testing, counselling, treatment for mothers, prenatal and child healthcare. The facility also offers various amenities which encourage the participation of children, such as exam study sessions and after school programmes.

#### 4.1.2 LOCATION MAP



Plate 4.1 Aerial photograph of the Ubuntu Centre in Zwide, Port Elizabeth. (www.earth.google.com)

#### 4.1.3 HISTORIC AND SOCIAL CONTEXT

Within the township of Zwide in Port Elizabeth there is a large percentage of people who are unemployed and a third of the population in the precinct is HIV positive. The effects of this disease compromises the quality of life for many individuals, often causing isolation,

alienation and despair. Mothers, who are HIV positive, require healthcare and support in practical and accessible ways. These statistics call for a solution whereby healthcare and skills development can be supplied. The Ubuntu Education Fund commissioned a development to serve as a platform for the organisation and the various services which they provide to the township community.

#### **4.1.4 JUSTIFICATION OF PRECEDENT**

Aside from offering various social services for marginalized women, the Ubuntu Centre's planning echoes the various theories, ideas and issues discussed in this research investigation. The actual location of the building is situated on an existing pedestrian path created by locals. This was done so as to integrate the building's facilities of healthcare, childcare and well being into the daily lives and routines of its users (Findley, 2010:46). This concept fits in with the concept of supportiveness; that environments must respond to the needs and lifestyles of its users (Mthethwa, 2001:22). The building itself, offers many functional conditions which are supportive towards the lifestyles and needs of women.

#### **4.1.5 EMPIRICAL DATA**

##### **4.1.5.1 CONCEPT**

The Ubuntu Centre was to be a building designed to cater for the needs of people. The concept of Ubuntu can be translated as 'I am because you are.' and was to be conveyed by using the building as a symbolic vehicle. The identity and meaning which the form of the building had to convey, needed to take cognisance of the amenities which the building offers; concepts of well being, integrity, upliftment and strength. As researchers have observed, many women desire environments which convey meaning and character (Wasserman, 2012:6). This sense of connection of between users and their built environment correlates with the views expressed by Rapoport regarding 'supportiveness' of a built environment. The building utilises trapezoidal forms to convey meanings of informality to its users (Plate 4.2-4.4). The development also aimed to unite various amenities within one complex, united through the existing informal pedestrian pathways (Plate 4.5)

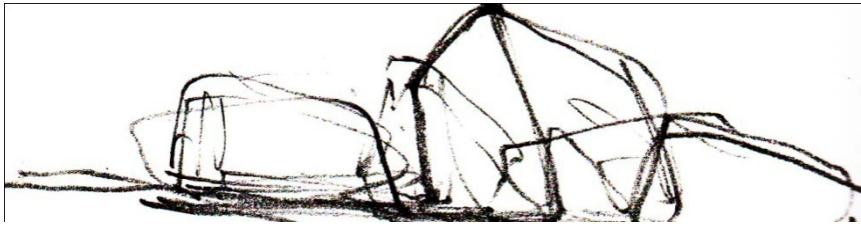


Plate 4.2 Conceptual sketch of form (Field, 2010:90)



Plate 4.3 South Elevation (Field, 2010:90)

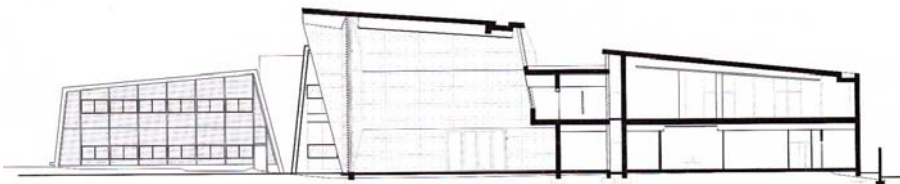


Plate 4.4 Section through Multi Purpose Hall and HIV/Tb clinic. (Field, 2010:90)

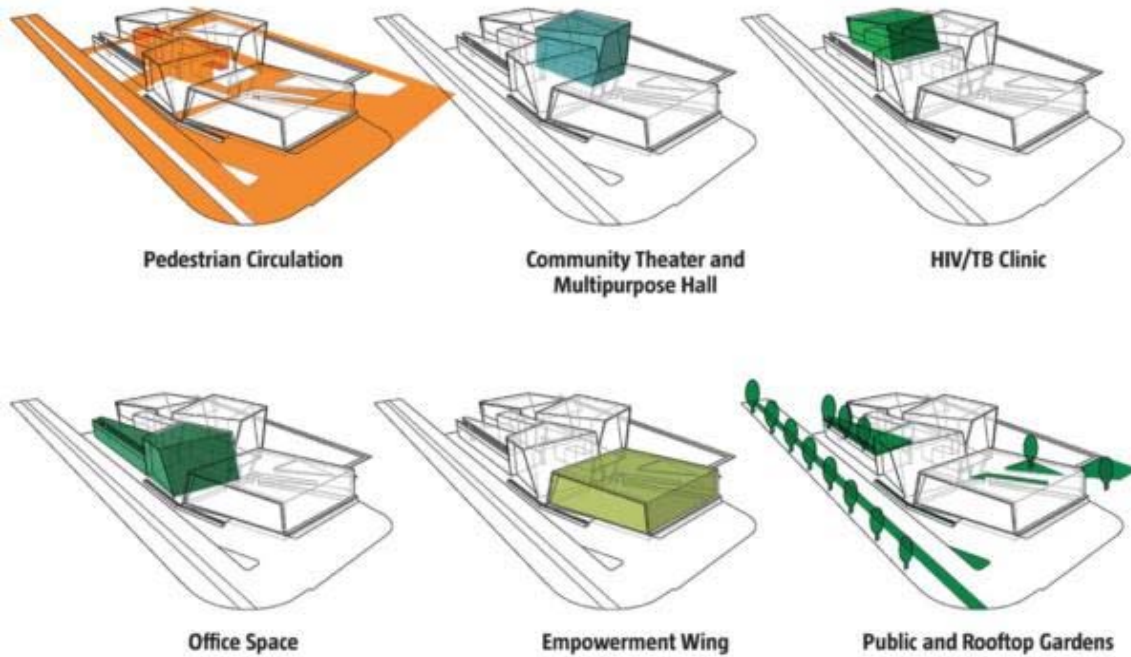


Plate 4.5 The various programmes offered by the centre. ([www.architectmagazine.com/design/the-ubuntu-center](http://www.architectmagazine.com/design/the-ubuntu-center))

#### 4.1.5.2 DESIGN LAYOUT

The building appears to be unusually open and accessible to the general public, an intentional design decision. The architects studied informal movement patterns, lifestyles and behaviour of marginalized individuals, especially those without vehicles as transportation. The building reinforces an informal pedestrian route across the site (Plate 4.6) and the lack of walls and barriers communicates to people that the building is to be seen as part of their journeys, their daily lifestyles and not a foreign or intimidating space. This deliberate breaking down of boundaries can be paralleled to the concept of organic architecture, whereby the environment should not be rigidly ordered or controlled (Shiva, 1988:40).

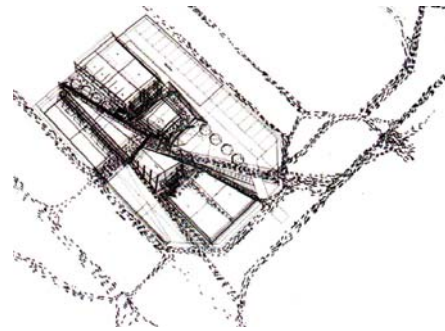


Plate 4.6 The building is situated within the framework of existing informal paths (Field, 2010:90)

The development symbolically states that healthcare, wellbeing and childcare are important and supported aspects of daily life. The planning of the building takes cognisance of its users' lifestyles and behavioural patterns through the careful planning of behaviour circuits. The building communicates various routes to its users in a passive manner, the use of floor materials and pavers suggest pathways and guides people from the plaza through to the central space between the building, where entrances to various amenities are present (Plates 4.7 & 4.8) (Findley, 2010:47). All of these design conditions communicate a passive and welcoming character which aids in the creation of *genius loci*, the spirit of a place.

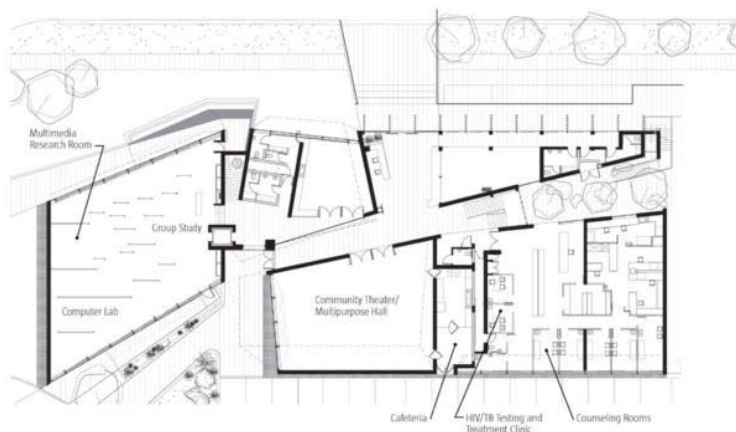


Plate 4.7 Ground floor plan of the Ubuntu Centre (Findley, 2011:48)

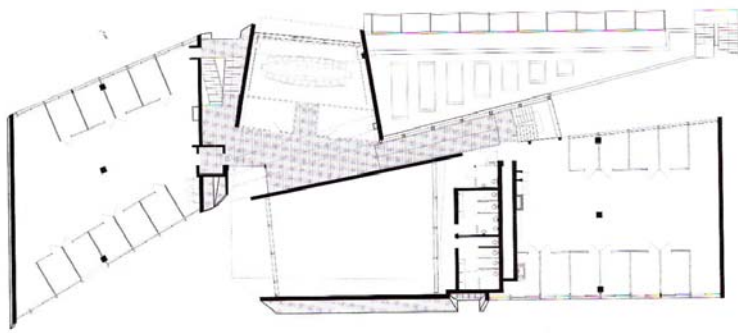


Plate 4.8 The First Floor Plan . Source (Field, 2010:89)

#### 4.1.5.3 PHYSICAL STRUCTURE AND FORM

Many of the building's functions have been represented by their own sweeping concrete envelope, which sits somewhat independently on site yet still evoking a dialogue with each other. Light enters through the open ends of the envelope and is filtered by a screen of gum poles (Findley, 2010, pp 49). The use of gum poles in the area had been practiced quite frequently and this way the building takes cognisance of local building methods and materials. The trapezoidal forms give the building character and presence whilst still maintaining a harmonious dialogue with the geographical setting through the use of strategic materials (Plate 4.9).



Plate 4.9 The view of the Centre from the main road. The trapezoidal forms give the building character and presence whilst still maintaining a harmonious dialogue with the geographical setting through the use of strategic materials. ([www.arisvrakas.com/colour/ubuntu-education-fund](http://www.arisvrakas.com/colour/ubuntu-education-fund))

Many planting areas are implemented throughout the building which aid in creating a comfortable, attractive and nurturing environment (Plate 4.10). The use of public furniture and hand rails communicate to the user that the space endorses and welcomes human interaction and engagement. The centre uses concrete to a large extent and this gives rise to notions of strength, integrity and stability. The natural forms are reminiscent of critical regionalists, who seek to create an architectural environment which encompasses the identity, character and essence of its landscape (Norberg - Schulz, 1971:31)



Plate 4.10 Planting areas integral to the building  
([www.fieldarchitecture.com](http://www.fieldarchitecture.com))

#### 4.1.5.4 HUMAN SCALE

The scale of the building has been taken into careful consideration as the centre is situated within a township consisting of small single storey houses. Thus, to create a building which does not intimidate or create a hierarchical presence over the houses, the architects employed the use of scale (Findley, 2010:47). The building's height is not easily distinguishable in terms

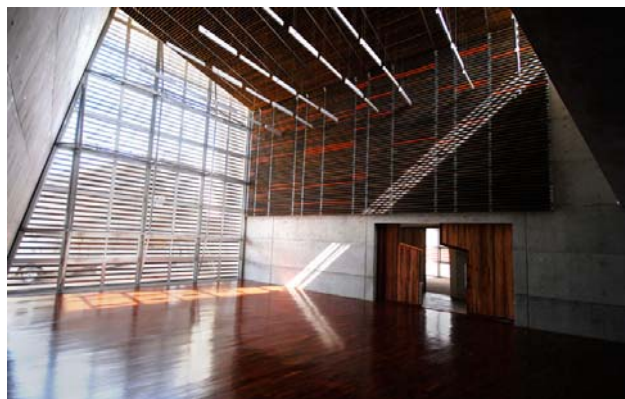


Plate 4.11 Interior view of the Multi Purpose Hall  
([www.fieldarchitecture.com](http://www.fieldarchitecture.com))

of how many floor levels there are, as the design language used reflects universal large volumes as opposed to floor layers stacked above each other (Plate 4.11 & 4.12). The building still however maintains an iconic presence. Height was diminished by spreading out functions on ground level into three core buildings; the clinic, education wing and meeting hall.

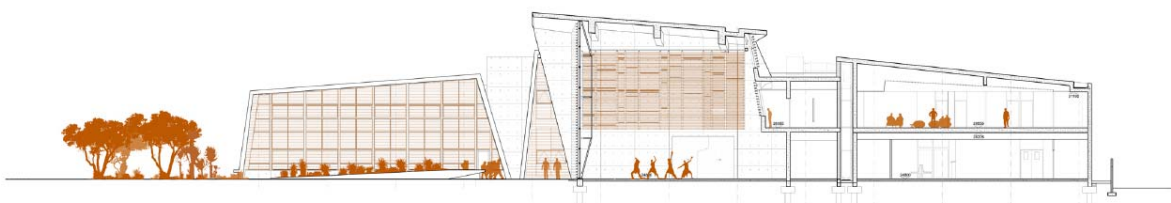


Plate 4.12 Sectional elevation. (Findley, 2011:47)

#### **4.1.6 CONCLUSION**

The Ubuntu centre is a fine example of how a building may be supportive towards women. A theoretical perspective of the development shows how concepts of functionality, meaning and scale can shape and define aspects of a building. The social context, lifestyles and challenges of the Zwide community were taken into account so that the building inevitably serves as a basis for human engagement and use. Aside from offering functional services such as treatment for mothers and prenatal care, the design of the building shows many design considerations which allow for a more democratic spatiality. The building allows for casual engagement, the footpaths of local individuals on the site was a primary informant of the planning process.

Sensitive scale was utilised extensively throughout the building and was informed by the circumstances of the surrounding context. The Ubuntu centre retains prominent identity without be overbearing of the surrounding informal context. The result is a successful building which improves the lifestyles of many women, by offering functional services as well as a dynamic environment that can be accessed and used passively. The building acts as a support centre which is easily accessible and available to the individuals who require it the most. These design considerations contribute towards fostering an identity which is hospitable and communicative as a place of support.

## 4.2 RUFISQUE WOMEN'S CENTRE

### 4.2.1 INTRODUCTION

The women's centre in Rufisque in Senegal is an example of a design orchestrated strategically for women. The centre acts as a hub for the activities of various women's groups and organisations (Plate 4.13). These groups include social clubs, volunteer literacy programmes, groups aiding in buying and selling of handmade artefacts, and other initiatives which help empower rural women.



Plate 4.13 Interior courtyard of the Rufisque Womens Centre ([www.hollmenreutersandman.com/portfolio](http://www.hollmenreutersandman.com/portfolio))

### 4.2.2 LOCATION MAP

The centre is situated east of the capital city Dakar. The physical topography of the site consists of fairly flat land with generally humid and hot conditions. The Women's Centre is located within the heart of the informal settlement of Rufisque Nord (Plate 4.14) (Varanda, 2004:3).



Plate 4.14 Location map of the Rufisque Womens Shelter (Varandah, 2004:2)

### **4.2.3 HISTORIC AND SOCIAL CONTEXT**

Within the population of Rufisque, the number of women is larger than that of men. As most men commute to work during the day, the remaining population consists generally of women. Traditional roles within the precinct generally associate men with public work or agricultural labour, and women have generally been housewives or been involved in the manufacture of food. Main public areas are dominated by men, either for work purposes or for leisure. The women within the city do not have a premises or location to gather, ultimately affecting their social involvement and quality of life. In current times some women have taken new roles such as fishing, however, most of the women within the settlement are restricted to private domains and household activities (Varanda, 2004:1).

### **4.2.4 JUSTIFICATION OF PRECEDENT**

Although not large in scale, the building deals with many social and urban issues faced by women. The project was largely implemented to offer support and opportunity to rural women within the area but it should also be viewed as an endeavour to boost local economic and social initiatives. In order to appeal to and comfort vulnerable women, this building has employed various techniques which relate to issues of overcoming alienation, instilling integrity, and containing a meaningful narrative within its design. Its small scale also allows for a response which is largely intimate, therefore it needed to convey and respond to the identity of its setting and users.

### **4.2.5 EMPIRICAL DATA**

#### **4.2.5.1 CONCEPT**

The centre can be described as a ‘house under a baobab tree’ as the structure was based on existing traditional compound typologies in that specific region of West Africa (Lang Ho, 2001:74) (Plate 4.15). This attempt to create a meaningful and user responsive architecture parallels the words of Rapoport, who put forth the idea that in order for environments to be meaningful, they respond to the needs and behaviour of its users (Rapoport, 1969:2)



Plate 4.15 The traditional concept of a settlement around Boabab Trees (Varandah, 2001:14).

#### 4.2.5.2 DESIGN LAYOUT

A primary objective for the women's centre was to serve as a platform whereby women could develop artisan skills which would then allow them to earn an income for themselves. This translated directly into the programme of the centre (Plate 4.16), resulting in three distinguished spaces: a cafe facing the adjacent road with accompanying preparation area and store room, a dyeing pavilion making use of various air ventilation techniques, and a hall to be used for various social, teaching and group related activities. On periodical Saturday evenings, the centre caters for entertainment for the people of Rufisque, primarily the *Sabar*, a traditional dance, is performed by young women (Varandah, 2004:4). In order to create a meaningful environment the building needed to be contextual and reflect the identity of the area and its people. Although the building is the first true public space in the area, the architects felt that the centre should convey a 'homely' environment. This was reflected in the way the centre's plan was based on traditional Senegalese homes, and through the extensive use of local and natural building materials (Lang Ho, 2003:74). The peripheral boundary is established through the implementation of solid outer wall which traces the boundary line, except for one corner which is open and serves as an access point to a small plaza and the outdoor cafe. On the South end of the Centre there is a guard's office and a look-out room for surveillance. The North end of the site is where ablutions are situated.

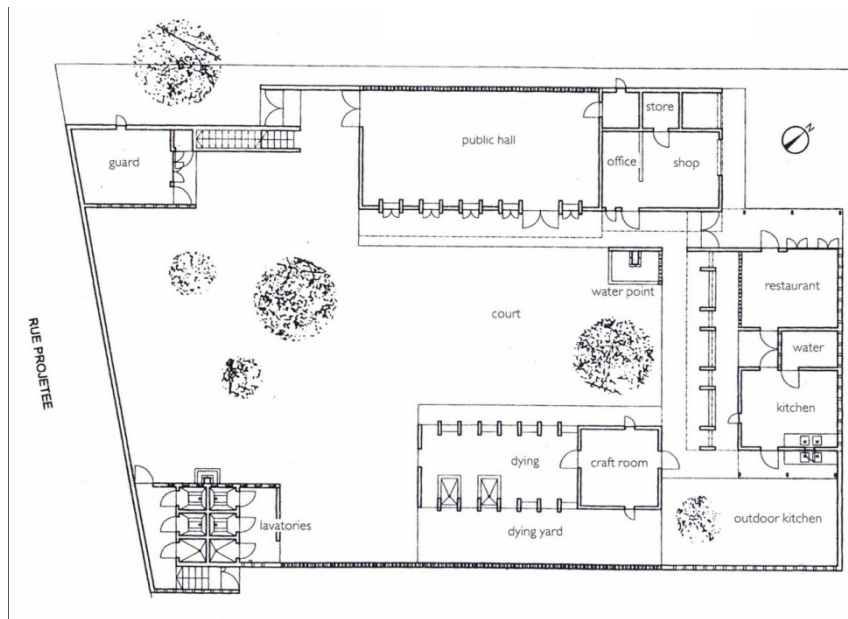


Plate 4.16 Floor Plan of the Women's Shelter. (Lang Ho, 2003:75)

#### 4.2.5.3 PHYSICAL STRUCTURE AND FORM

A major part of the building's image and character can be attributed to the colour used. In contrast to the dull grey tone of the surrounding buildings, the women's centre is painted a vibrant red which carries with it many powerful connotations. The notion of utilising recycled materials was implemented on many levels, where air vents were fashioned after discarded car wheel rims, and green beer bottles were used to create a facade of 'glass bricks'. The architects also utilised a fast disappearing skill of the locals; straw matting, and used it as an insulation layer between the ceiling and roof (Lang Ho, 2003:74). The prominent colonnade softens the transition between interior and exterior space (Plate 4.17). Traditional techniques within the areas were also manifested with regard to form, where wide and strong walls



Plate 4.17 The colonnade softens the transition between interior and exterior (Varandah, 2004:17)

created a sense of permanence and stability (Plate 4.18, 4.19 & 4.20).

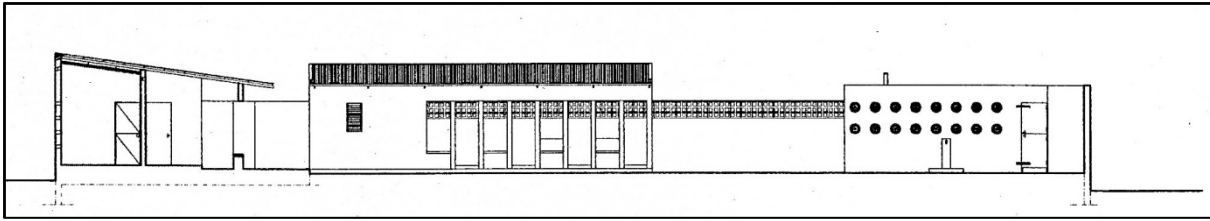


Plate 4.18 Southwest northeast section (Lang Ho, 2003:75)

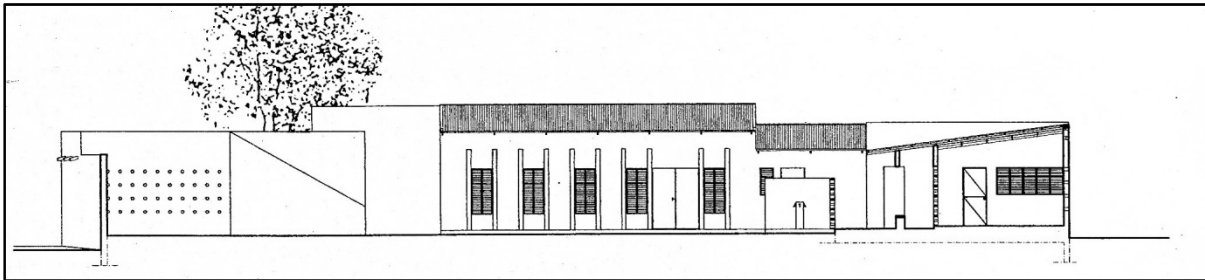


Plate 4.19 Northeast southwest section. (Lang Ho, 2003:75)



Plate 4.20 The building utilises local building methods and is painted a vibrant red conveying notions of strength. ([www.archithoughts.wordpress.com/2011/03/31/womens-centre-in-rufisque](http://www.archithoughts.wordpress.com/2011/03/31/womens-centre-in-rufisque))

#### 4.2.5.4 SCALE

The sensitive scale of the women's centre was intentionally formed so as not to intimidate or demean the existing informal infrastructure. As a result, the building utilises modest forms which do not seek to overwhelm or transcend the surrounding context, but rather to compliment and become an extension of the informal fabric (Plate 4.21). The various techniques,

building materials and textures all reduce the scale of rooms and create an interesting and meaningful environment to engage with. A successful example of this would be the roof and ceiling aesthetic which creates a natural and segmented interface above many of the spaces (Plate 4.22). The manner in which the shelter is constructed produces a formation of patterns and textures throughout the floors, walls and ceilings of the building. The simple aesthetic treatment of a sun screen facade reduces anonymity of spaces and creates interesting textures (Plate 4.23). This application in particular also affects the light which enters the building, in this way the patterned light itself would add a new dimension to the interior space. In conjunction with creating a sustainable architecture, these screens keep the area cool under high temperatures. Various other techniques, such as the use of recycled beer bottles and small plants tiles, help reduce the scale of the shelter to human dimensions. This reduced scale adds the overall identity of the Rufisque women's shelter and conveys connotations of purpose, passivity and safety. A primary function of the shelter is to communicate a nurturing and safe space - intimate scale and dynamic architecture assimilate to achieve this.



Plate 4.21. The sensitive scale of the women's centre ([www.bustler.net/index.php/article/big\\_architecture\\_coming\\_to\\_slovenia\\_this\\_may](http://www.bustler.net/index.php/article/big_architecture_coming_to_slovenia_this_may))



Plate 4.22 The traditional thatched roof reduces the visual scale of the room. (Varandah, 2004:16)



Plate 4.23 The sun screens produce a pattern which breaks away from monotonous and anonymous facades (Varandah, 2004:17)

#### **4.2.6 CONCLUSION**

The Rufisque Women's Centre is a precedent which focuses on the direct interaction of vulnerable women and their environment. The project shows the importance of a building's ability to communicate meaning to its users. As an environment exclusively designed for women, the building pays attention to developing a welcoming and hospitable character and identity. Use of traditional building techniques and symbolism produced an environment which is identifiable and functional to its users. The local and immediate context was utilised as a primary informant and the building uses sensitive scale so as not to induce hierarchy over the surrounding houses and people.

It is revealed that the building also accommodates the most basic facilities needed for these women in vulnerable contexts; hygiene, shelter and social space. The women's shelter is a nurturing environment where women may not only achieve healing towards themselves but may also empower others, thus empowering themselves. The building uses design elements which convey intimacy and a passive interface. The shelter symbolises the strength and integrity of the women within, a beacon of hope and safety within the precinct.

## **CHAPTER 5: CASE STUDIES**

### **5.1 KEY CASE STUDY: THE GERMISTON CIVIC CENTRE**

#### **5.1.1 INTRODUCTION**

The Germiston Civic centre is a building which challenges the rigidity and organisational control which is typical of civic spaces. The inclusion of urban treatment and dynamic form results in an architecture which is tailored specifically for human use. The building utilises the surrounding context as a crucial informant and offers various services and spatial dynamics which are conducive to supporting women. The centre offers a mixed use of functions and assimilates these services within one building envelope.

#### **5.1.2 LOCATION MAP**

The Germiston civic centre is located on the periphery of Germiston Central Business District, on a triangular site.

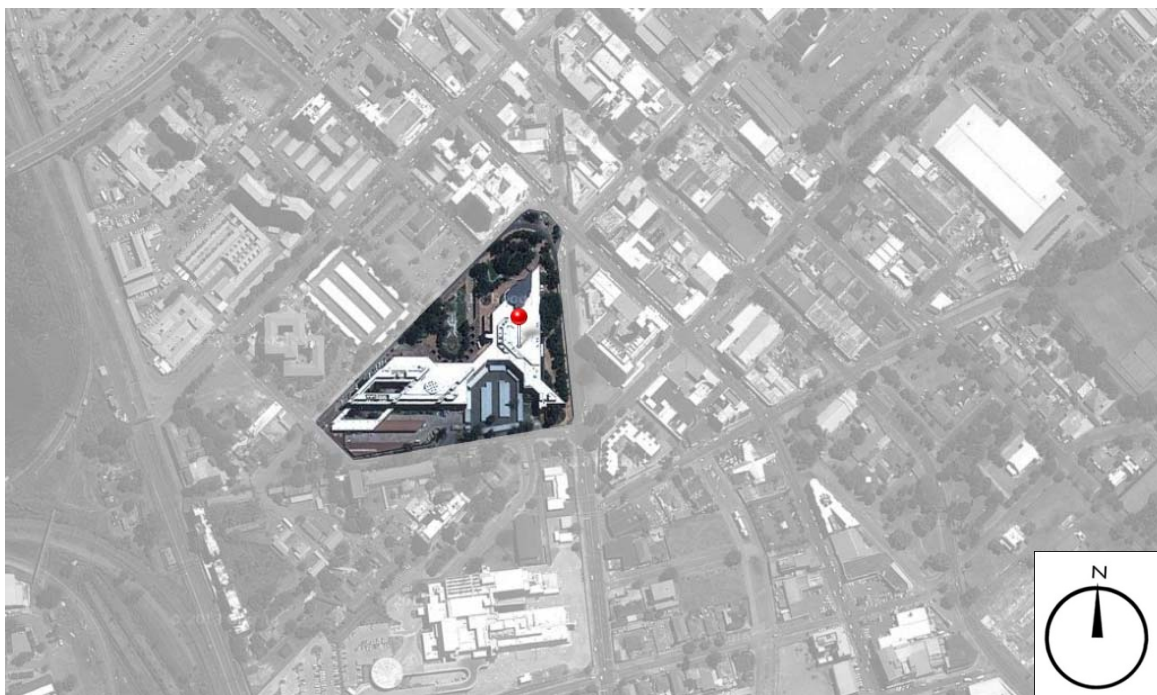


Plate 5.1 Location of Germiston Civic Centre ([www.earth.google.com](http://www.earth.google.com))

#### **5.1.3 HISTORICAL AND SOCIAL CONTEXT OF CASE STUDY**

The Germiston Civic Centre was awarded to Co – Arc International Architects as the winning entry for a competition for a new Civic Facility for Germiston in 1972. The initial phase of construction in 1983 saw the development of a library and a healthcare clinic, an unusual

addition to a civic centre, which offered permanent and dedicated facilities. The second phase of construction implemented the municipal and legal facilities offered by the Civic Centre. This included a city hall, council chambers, public conference rooms and town secretary offices. The existing built fabric of Germiston was 'haphazard' and contained no distinct civic identity. The architectures posed a solution whereby a new civic centre could be integrated into the existing fabric whilst being functional, accessible and iconic.

#### **5.1.4 JUSTIFICATION OF CASE STUDY**

The research presented in this study thus far outlines key issues which deter many women from civic spaces and precincts. These deterrents include a lack of diversity of functions, inconvenience, safety concerns, and minimal healthcare facilities. Most public spaces contain limited functions and are either public or private orientated and as a result creates islands of inclusion and exclusion towards many women occur within the urban fabric

Civic centres are buildings which function as hubs of public activity and contain facilities whereby individuals may interact with municipal authorities, interact socially and participate in community events. This multipurpose centre offers single premises whereby a multitude of necessary activities may take place. Many urban settlements have municipal, cultural and healthcare facilities sprawled out over large distances and located in arbitrary settings. A civic centre acts as a platform which unites these functions into one building, which assists in convenience and functionality towards the community. This functional interface assists in improving the quality of life for many women who have multiple commitments, such as handling finances, childcare commitment, and domestic activities. The Germiston Civic Centre offers diverse functionality and a modern approach to its social and spatial dynamics.

#### **5.1.5 EMPIRICAL DATA:**

##### **5.2.5.1 CONCEPT**

The architects of the Germiston Civic Centre have utilised the motif of a harmonious form of architecture where the building is to be an extension of the surrounding environment as opposed to being a distinctive separate entity. The building also incorporates urban design treatments which blur the distinction between spaces. This attempt of designing with context in mind is similar to the ideals embodied by organic architecture, whereby the domains

of nature and man-made environments are purposefully assimilated to produce unrestrained spaces (Wright, 1945:127). The building harnesses the surrounding context and contains a flowing aesthetic, thus creating spaces which transition effortlessly into each other as opposed to the utilitarian and monolithic motifs used by most Civic Centres. The building also utilises natural elements throughout the perimeter and this serves as an introductory space to users entering the site, a place of peace, activity and tranquillity.

Meaningful architecture is achieved through various responses. The building utilises horizontal elements to highlight its usability and forms the chamber through a subtle difference in height. Within the interior of the building, the playful use of light through the use of skylights animate the interior spaces beneath and add a dynamic, almost living quality to the development (Plate 5.2). Norberg-Schulz speaks of this ability of the natural world to bring forth life into man-made spaces (Norberg-Schulz, 1980:69). The building is meant to be identifiable to those who use it most, and therefore local building traditions and materials, such as face bricks, were used in the construction of the centre.



Plate 5.2 The use of light adds a dynamic spatial character to the interior (www.co-arc.com)

#### **5.2.5.2 DESIGN LAYOUT**

The planning layout of the civic centre is largely influenced by the various functions which it provides (Plate 5.3). The assimilation of diverse facilities shows a dynamic building typology which appeals and supports a variety of individuals. Unlike the majority of civic buildings in South Africa which contain utilitarian and rigid design forms to convey power and importance, the Germiston Civic Centre has taken a different approach by being more approachable and integral to the landscape. The building footprint resembles the triangular footprint of the site and the interior planning also implements an angular theme. This attempt at using dynamic shapes to form spaces also creates for a more interesting environment in which to engage with.



Plate 5.3 Floor plans of the Germiston Civic Centre.(Co-Arc International Architects Inc. 1972.)

Within the Germiston Civic Centre there is a community library which facilitates younger children on the ground level (Plate 5.4). With regard to the study at hand, this space could be utilised, for example, by mothers seeking a safe place to leave their young children whilst attending to activities such as municipal payments within the civic centre. The children's space consists of a storytelling corner surrounded by preschool tables and bookshelves, clearly demarcating a child orientated area within the room. The space is monitored by a supervisor and is not directly visible to any individual outside the centre on the North facade. The control desk facilitates all access and surveillance occurs throughout the library. This

facility provides a safe haven within a civic environment where mothers are able to confidently place their children.

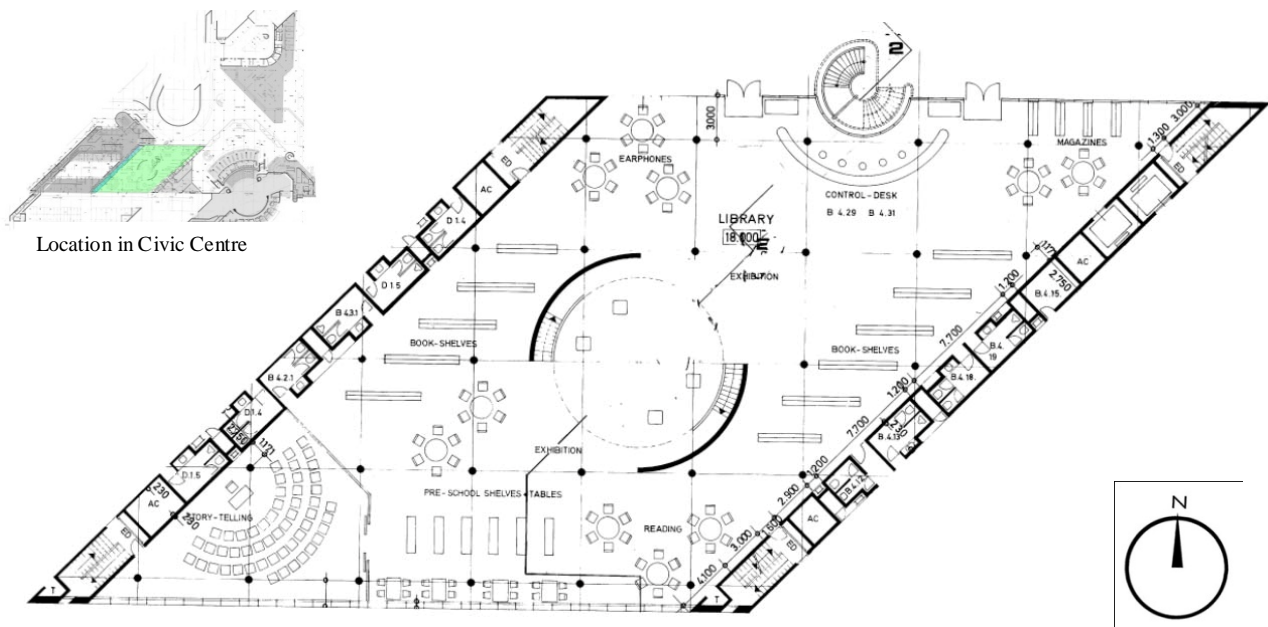


Plate 5.4 Ground Floor Plan of the Library (Co-Arc International Architects Inc. 1972.)

The Germiston Civic Centre also contains a fully functioning and dedicated clinic (Plate 5.5). The inclusion of healthcare facilities directly in civic buildings is not often seen within the typologies present in South Africa. This facility caters as a reliable place where the community at large may seek healthcare. The first floor contains consultation offices and treatment rooms which are lifted above the active ground floor, thus indicating that certain individuals will be allowed a degree of privacy and space in which to seek medical attention. When utilised by a women, the individual will not be exposed to a generic and cold environment, but rather a soothing space centred around a courtyard which induces tranquillity. The first floor private therapy spaces also convey safety as they are suspended above the street level.

The healthcare facility also contains various lecture hall facilities whereby the public at large, including women, may be educated of health issues and relevant courses of action. Facilities such as these empower individuals by spreading knowledge, not only are various women empowered but they will be able to learn more about healthcare issues pertaining to infants and children as well.

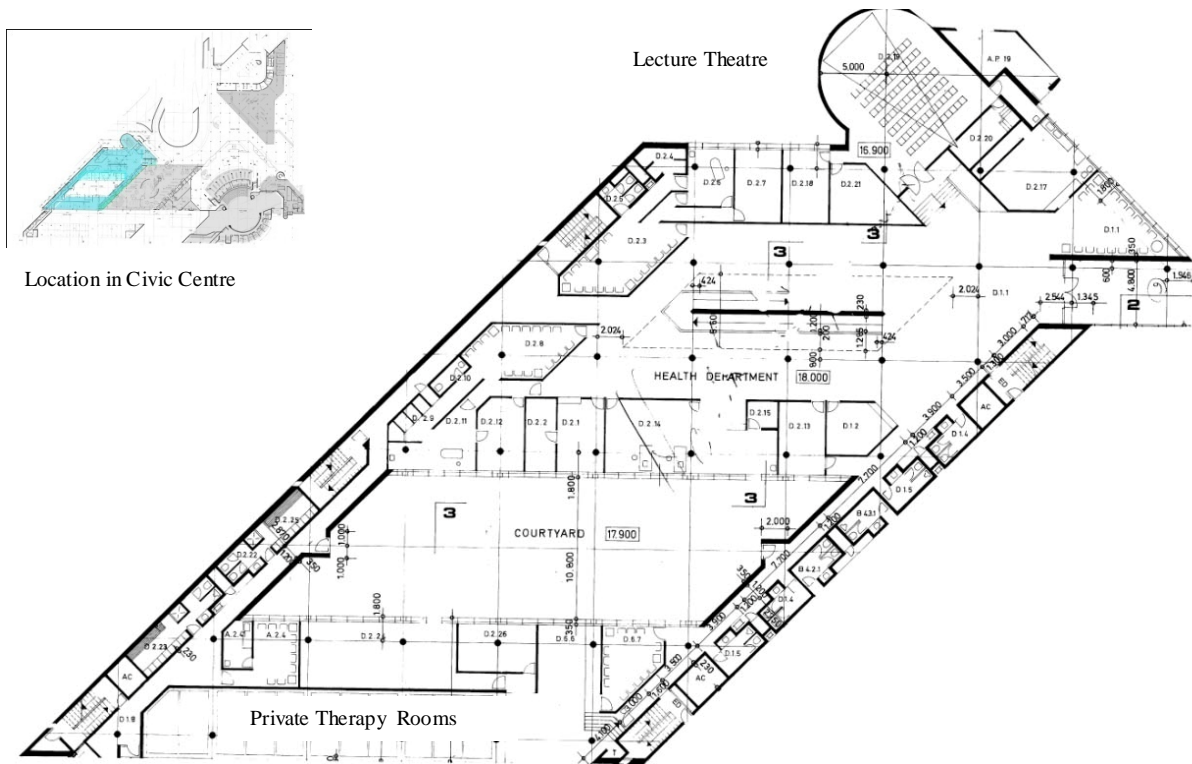


Plate 5.5 Ground Floor Plan of the healthcare facility.(Co-Arc International Architects Inc. 1972.)

Lavatories throughout the building are not accessible via the same passage and are typically flanked on either side of facilities such as the council chamber and public hall on the first floor (Plate 5.6). This allows for a certain degree of privacy and personal space for either sex, although the lavatories present currently lack a dedicated space for infantcare. On the ground floor the building provides a cafeteria which provides food to the users and catering during large events at the civic centre. It is situated adjacent to the art gallery and theatre, adding more diversity in terms of function within the centre. The Art gallery functions as a space where individuals are able to experience and explore through observation passive and spontaneous interaction.

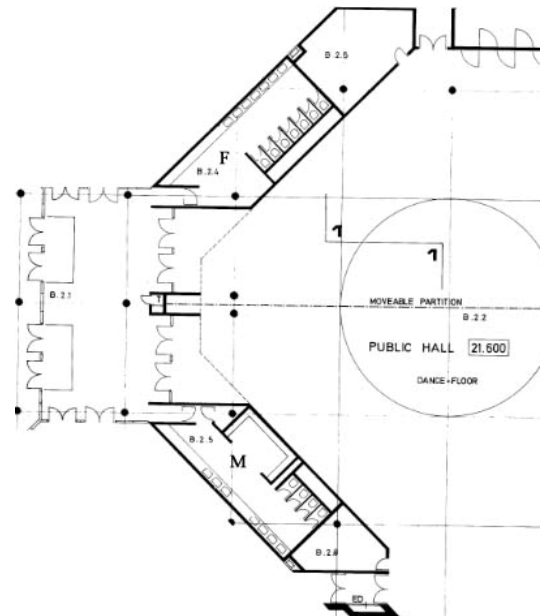


Plate 5.6 The public hall and adjacent lavatories (Co-Arc International Architects Inc. 1972.)

### 5.2.5.3 PHYSICAL STRUCTURE AND FORM

The civic centre is comprised of a single mass which contains various facilities and amenities (Plate 5.7). The building's footprint is derived from the triangular shape of the site, featuring a prominent recess forming an amphitheatre and plaza. The building uses various techniques so as to reduce the scale and visual weight of the building through the use of horizontal design treatments. The facades of the civic centre appear to flow effortlessly into each other and retain a fluid characteristic. This is further emphasised by the treatment of the council chamber which uses curvilinear forms and design treatments. The diversity of forms creates a dynamic interface and serves as an interesting environment in which to engage with. The building also contains a layered effect which is reinforced in the way in which floors form terraces as the building rises.



Plate 5.7 Perspective of the Germiston Civic Centre ([www.co-arc.com](http://www.co-arc.com))

The Germiston Civic Centre appears to rise up from the ground, a characteristic which is enforced in the sloped lawns which connects the upper floors of the building to the lower street. The periphery of the site contains various design treatments and is very well planted, containing a diversity of landscaped elements which create an attractive setting as well as serving as a passive transition point between the street and building. When viewed from a distance, the building appears to be situated within a sanctuary of lush vegetation and is aesthetically pleasing. The urban treatment also contributes to the identity of the building and

creates a welcoming and passive character that conveys human scale and movement to its users. A universal design language is utilised throughout the building and it establishes its own character within the urban fabric. The building appears as a platform and a background in which human interaction and engagement is clearly seen as a priority. The sensitivity of design treatments create a large building which is not dominating over the surrounding environment or its users.

#### 5.2.5.4 SCALE

Many civic buildings need to convey power and presence, and in order to do this, large monolithic forms are often used. The forms and design considerations observed in the Germiston Civic Centre reveal that the building is not overbearing or intimidating and instead offers an inviting and human scaled approach.

The building also maintains a horizontal presence, the dimension which is associated with human movement and therefore serves as a platform for human use and engagement. Verticality is avoided throughout the building as wide strip windows enforce horizontal perception. The bricklaying method itself produces more horizontal patterns through the



Plate 5.8 The bricks create a horizontal pattern along the façades which diminishes the scale of the building (www.co-arc.com)

mortar joints (Plate 5.8). The use of bricks also visually breaks down the surface area of the facades by offering varied colouring and markings of different hues. Importance of the chamber is conveyed through the height of the council chamber yet it is not overbearing when compared to the rest of the building. This is due to the form containing a diagonal design treatment which gradually increases the height of the chamber walls instead of manifesting as a distinct, towering element (Plate 5.9).

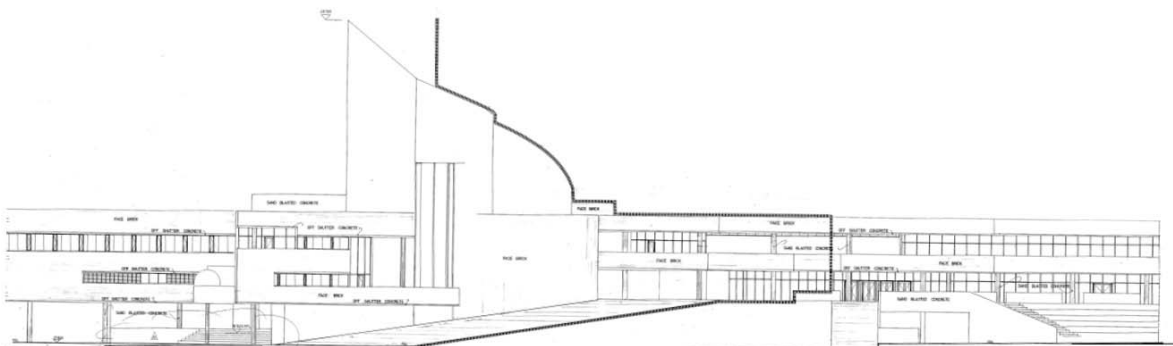


Plate 5.9 The height of the chamber is gradually achieved and is not dominating over the surrounding built form. (Co-Arc International Architects Inc. 1972.)

Through the use of offsetting and manipulation of the larger building forms, the overall scale and visual weight of the building is reduced. Human scale design treatments are found throughout the site and added features such as steps, fountains, outdoor tiles and urban treatments reduce the scale of the building to that of human proportions and therefore make it more approachable (Plate 5.10 & 5.11). The small scale design treatments add texture to large spaces and reduce monotony, creating a more dynamic character.



Plate 5.10 The amphitheatre features human scaled elements such as stairs and seating ([www.co-arc.com](http://www.co-arc.com))



Plate 5.11 Design treatment which add character and reduce the scale of environments. ([www.co-arc.com](http://www.co-arc.com))

### **5.1.6 CONCLUSION**

The Germiston Civic Centre contains a unique approach towards civic architecture. By nature of the building typology, the development is required to demonstrate the social and political dynamics of the country. The case study has challenged past rigid and organisational civic buildings by offering a more passive human based interface which encourages participation from the community. As various components of civic centres are required to show hierarchy, such as the council chamber, it is interesting to see that the Germiston Civic Centre achieves this without being overbearing. The overall shape and form of the building conveys democratic notions of freedom and unrestraint.

The amenities provided within the building are also supportive of women, either directly or indirectly. The dynamic planning of the building gives all individuals, including women, more choice with regard to movement and interaction with the environment. The multi-purpose nature of the building makes it a convenient place to go to when seeking healthcare, entertainment and enrichment.

## **5.2KEY CASE STUDY: THE MPUMALANGA PROVINCIAL GOVERNMENT COMPLEX.**

### **5.2.1 INTRODUCTION**

The Mpumalanga Government Complex was commissioned in the same year that South Africa received its Independence. As the winning entry for a competition, Meyer Pienaar Tayob Schnepel Architects envisioned a building which encompasses the site and reflects a new attitude towards civic architecture, one which symbolically and physically manifests the new views, beliefs and social dynamics of a democratic society. Fulfilling a brief that required legislative and administrative functions, the design sought to convey power, identity, and above all, meaning to the people of South Africa. The site is situated away from the city centre of Nelspruit, tucked away in a magnificent landscape adjacent to the Nels River and Crocodile River.



Plate 5.12 Perspective of the Mpumalanga Provincial Government Complex ([www.co-arc.com](http://www.co-arc.com))

## 5.2.2 LOCATION MAP

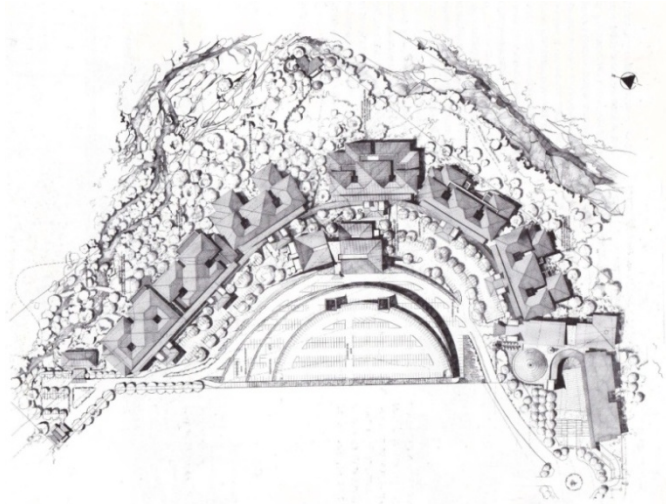


Plate 5.13: Site layout of the Mpumalanga Provincial Government Complex. (Malan &McInerney, 2001:26)

## 5.2.3 JUSTIFICATION OF CASE STUDY

A legislative building is by nature an iconic building within the cultural landscape and demonstrates the values and beliefs of a given society. As a relatively new, post-apartheid and postcolonial development, the complex sought to display the essence of democracy through its design. An underlying element of the brief would be to represent a new set of values and beliefs which transcend from the rigid, segregating nature of past socially dividing systems. As democracy involves the freedom and diversity, the building's design conveys notions of these beliefs through its form.

## 5.2.4 HISTORICAL AND SOCIAL CONTEXT OF STUDY

In 1994 the premier of the newly established Mpumalanga provincial government, Matthews Phosa, stated that the settlement of Nelspruit would require a facility in which to conduct legislative and administrative matters. This was a pivotal time in the historical and social context of South Africa as this was the era in which crucial turning points in the country occurred. The abolishment of Apartheid signalled a change in social, political and economic perspectives. The major shift in thought was from an oppressive and exclusive political system into a democratic system which promoted equality, diversity and freedom.

## 5.2.5 EMPIRICAL DATA

### 5.2.5.1 CONCEPT

From the initial onset of the project, the architects intended to create a complex which embraced the vivid and magnificent natural setting of the site. This can be equated to the concepts of Organic architecture, where buildings are integral to their natural landscape. The architects opted for a horizontal development which would extend from the natural contours of the site. This mass of buildings would form a crescent around the trees of the adjacent forest, and further connections between the building and the natural environment could be made. The building achieves connectivity within its own spaces as the administrative wings pivot around the central dome enclosing the chamber. This arrangement forms a crescent which collectively ‘gathers’ the various buildings together. The overall building also seeks to embody notions of democracy through informal yet dynamic and symbolic spaces.

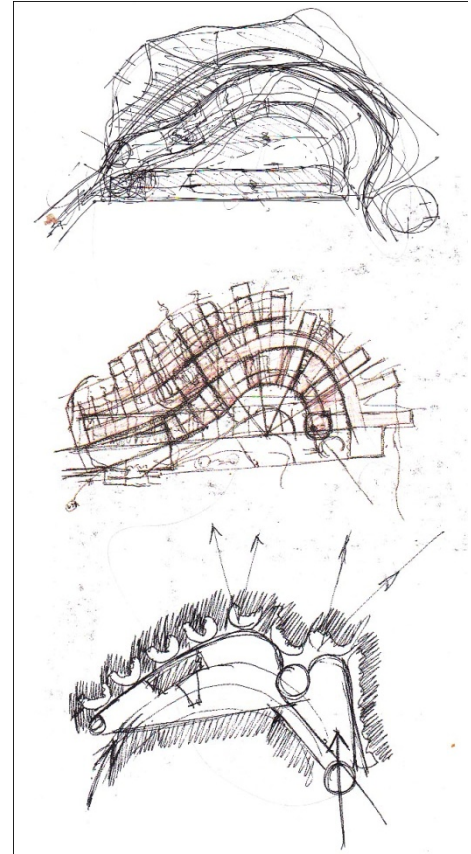


Plate 5.14: The conceptual forms behind the planning of the complex. (Malan &McInerney, 2001:24)

Women within the local region were to be encompassed in the design and identity of the development, adding their personal touches throughout the complex. The gender-specific practice of embroidery by women in the local area was utilised extensively and was to be incorporated into the identity of the facades and interface of the building (Malan & McInerney, 2001:120).

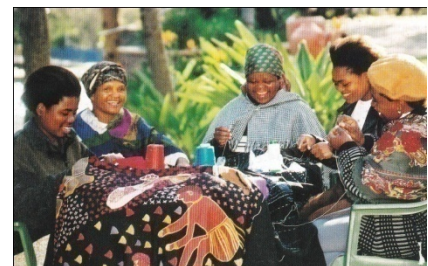


Plate 5.15: Women performing embroidery to create the art panels used in the legislative chamber (Malan &McInerney, 2001:120)

### 5.2.5.2 DESIGN LAYOUT

Civic spaces are generally ordered and definitive spaces which make use of rigid and ordered forms. The Legislative building however challenges this notion by adding informal, curvilinear elements. This can be seen in the circular colonnade and the dome enclosing the chamber, which has an organic feel (Plate 5.16). This move away from rigid and controlling spaces is a reference to the new democratic views of its intended users. The resultant space conveys power yet is not overbearing.

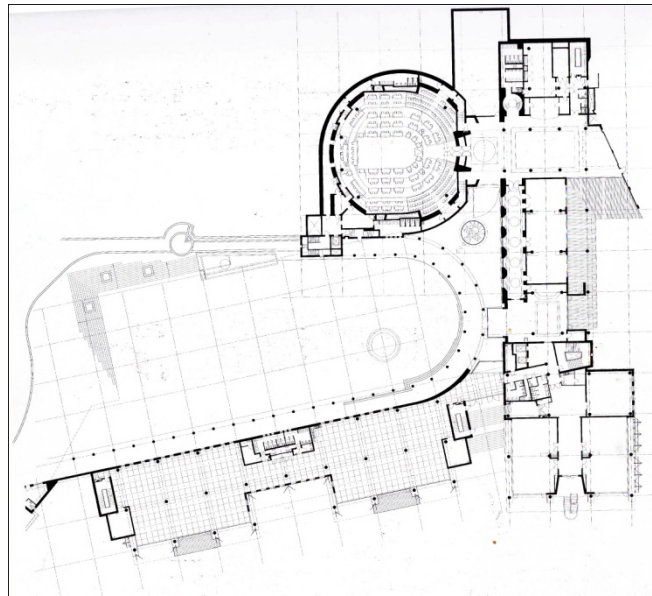


Plate 5.16. Floor plan of the Legislature building (Malan &McInerney, 2001:36)

Hierarchy is established through the creation of a large dome which the entire site uses as a central point (Plate 5.17). Within the public square adjacent to the chamber, a Paperbark Acacia tree is situated. This metaphorically marks the *Kgoro*, the traditional meeting place of leaders. In order to symbolically represent power the building uses what Schulz refers to as the existential dimension, that of verticality to convey importance. Hierarchy is subtly achieved as the greater height of the chamber dome is only perceivable from a distance. The curvilinear spaces are a reflection of the Democratic African way of ‘gathering’ together and co-operation. (Malan &McInerney, 2001:35)

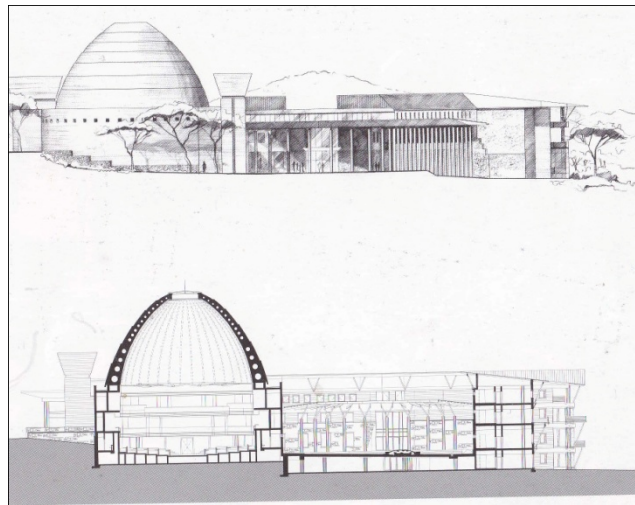


Plate 5.17. West elevation and Section through the legislative chamber (Malan &McInerney, 2001:37)

### 5.2.5.3 PHYSICAL STRUCTURE AND FORM

The complex exudes notions of organic architecture, and Genius Loci simultaneously, with the entire development seamlessly integrating into the natural environment surrounding it. Plate 5.18 shows the buildings gently resting over the landscape, where the man-made structures form an extension of the landscape. The distinction between the natural setting and the complex is blurred (Plate 5.19 ). On ground level the building does not interrupt the natural landscape by implementing perimeter walls, but utilises columns which soften the edge between the landscape and the structure. The buildings are laid out according to the contours of the site and as the building extrudes upwards it still maintains the natural curvature of the site. The living and the non-living realms are not separate and complement each other as individuals experience and interact with the spaces

The buildings display an intricate composition of scale, colour, form and composition to create an environment which conveys meaning and purpose. The natural elements and identifiable human scale elements used in the building provide for an attractive and welcoming interface. The use of columns and vertical supports is used extensively throughout the building to soften the threshold between the building and the exterior environment (Plate 5.20. The interiors and exterior of the buildings themselves maintain a harmonious dialogue through use of large windows.

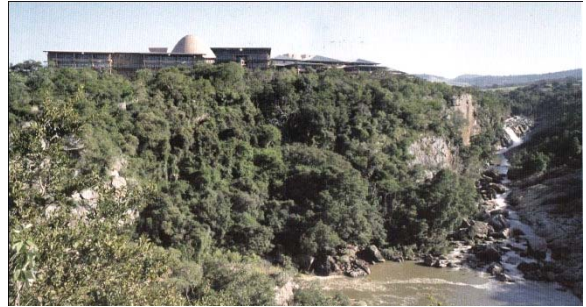


Plate 5.18: The complex is situated directly adjacent to the Nel and Crocodile River. (Malan &McInerney, 2001:20)



Plate 5.19: The administrative buildings overlooking and connecting with the NelsRiver (Malan &McInerney, 2001:131)

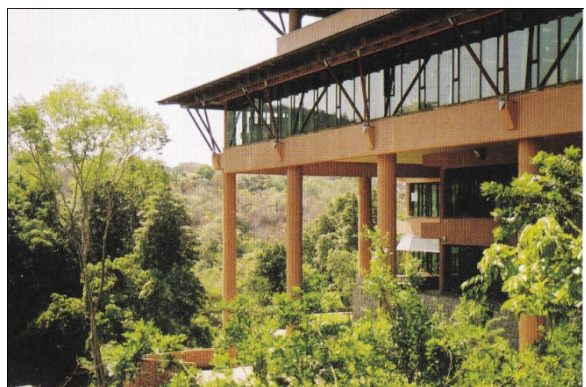


Plate 5.20: The building embraces the natural surroundings and blends in harmoniously. (Malan &McInerney, 2001:60)

The building supports women on various levels. The inclusion of the customs and local practice of embroidery as a pivotal design motif is an example of the way in which women's lifestyles and activities has been integrated into built form (plate 5.21). These symbols convey an identifiable narrative to its users and thus the local women have been embodied within the building. Embroidery, a gender specific practice performed by the local women, was used extensively in the treatment of the facades and textures found throughout the building. The chamber, a politically significant space and one where order and control is typically manifested, is given a new definition. The space is colourful and exudes character and patterns which further reflect the identity of the local women. The space is not intimidating and is rich in character. Various textures soften the environment and decrease the formality of the space (Plate 5.22).

The spaces allow an abundance of light to flood the areas, allowing for visual surveillance (plate 5.23).The building incorporates user-friendly materials and elements which were designed for human interaction such as balustrades and foot railings. These are various human scale design treatment which many women would find attractive, comforting and welcoming.



Plate 5.21: Many facades within the buildings reflected patterns and symbols utilised by local women (Malan &McInerney, 2001:39)



Plate 5.22 The chamber incorporates a colourful and detailed interior, adding texture and character to the space (Malan &McInerney, 2001:39)

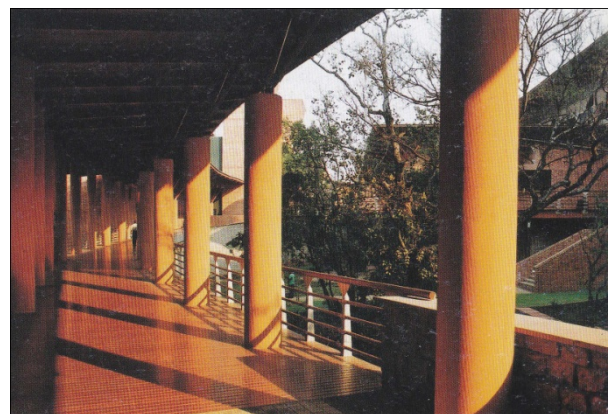


Plate 5.23 The wide staircases used throughout the complex (Malan &McInerney, 2001:51)

### 5.2.5.5 HUMAN SCALE

Governmental buildings are by nature, extremely large developments which can be very intimidating and monolithic. The design language of the Mpumalanga Governmental Complex however, has strategically enforced design motifs to ensure a pleasurable interaction and experience of the building. The various buildings are oriented in the same manner as the contours of the land and as a result the interference with the natural setting and experience is minimal (Plate 5.24). The use of a colonnade softens the building and is the primary tool used to introduce the building on ground level. The building features intricate detailing and patterns which are reflective of the identity of local women, these treatments again soften the spaces and also add texture, avoiding blank facades and walls. This also adds character and makes the environment visually interesting and intricate.

Natural materials are used so that users experience the development harmoniously and in a manner where they become a part of their surroundings. Here the theory of Organic architecture comes to mind, as the man made world celebrates the character of the natural setting. Human interaction is also encouraged by adding elements which are conducive to human interaction, such as handrails and timber decking (Plate 5.25).



Plate 5.24: Various elements of the complex, the walkways, decks and vegetation create an intimate experience. (Malan &McInerney, 2001:43)

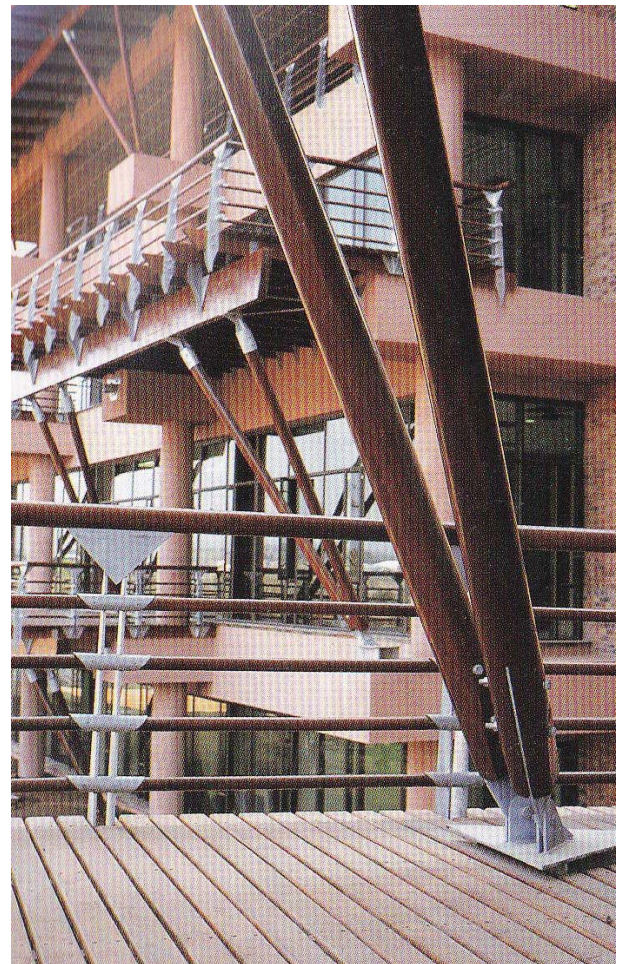


Plate 5.25: The complex incorporates a diversity of intricate aesthetic and structural design elements. (Malan &McInerney, 2001:43)

## 5.2.6 CONCLUSION

Legislative buildings have an unspoken role in conveying political beliefs and values. In a Post apartheid context, the Mpumalanga Legislative complex is successful in conveying a democratic environment. The building utilises theoretical framework which points toward a passive architecture that draws inspiration from the surrounding social and environmental context. Women were shown to be a pivotal part in the development of the project. Customs and gender specific activities by local women were used to enrich the character and identity of the building.

In a new representation of a society which previously held many beliefs and restrictions on women, the legislative complex successfully integrates the identity of the local women and conveys a free and unrestrained environment. The buildings are placed casually on the site and the architects have used various techniques to reduce the scale of elements within the building so as to create a comfortable interface. The architects have utilised various techniques such as columns on the ground floor to blend in harmoniously with the built environment

## **CHAPTER 6: ANALYSIS AND DISCUSSION**

### **6.1 INTRODUCTION**

The researcher believes the investigation was a fruitful and enlightening exercise and that the data gathered thus far has provided useful information regarding environments supportive towards women. Primary research was conducted in the forms of interviews, informal discussions and questions so as to gain insight of the respondent's perspectives on the study. Although this study calls for a qualitative approach, statistics will reveal general preferences of women to certain ideas. The results will be analysed and a discussion will take place regarding a comparison of the findings to issues raised in the literature review and the initial problems identified in this study.

### **6.2 SUPPORTIVE ENVIRONMENTS**

An interview with Mrs Gloria Degee, the organiser of a crisis support centre, and the Shiloh House of Hope for abused women, revealed various challenges faced by women within the city of Durban. Degee manages a help centre for women in the need, which is located on the first floor within an office complex south of the Durban City centre (Plate 7.1). This support centre runs in conjunction with, and is a prerequisite phase to, being admitted to the Shiloh House of Hope for women in Berea.

Degee stated that she tries to make her counselling and therapy rooms comfortable places where the experience of moving in and out of the rooms becomes an enlightening and uplifting journey for the patient. This upliftment takes place through various subsequent phases which is reflected in the use of the rooms and spaces within the help centre. Vulnerable women who enter the building for the first time are welcomed in a casual seating area with plants and a soft sofa which introduces the passive nature of the centre as well as calming the individual before an introduction takes place in the adjacent office. The introduction and identification of the problem takes place privately in the reception and administration room and it is here where the patient is either placed in group counselling, private therapy or in the Shiloh house of Hope shelter, depending on the circumstance. The counselling rooms are not only used by representatives, but also by women who are in the

healing process themselves. Degee explained that the best method towards well-being and self-help is through the process of helping others.

Degee utilises plants and natural elements throughout her premises in an attempt to soften the harsh character of the office layout. The plants add life and a dynamic, refreshing characteristic which conveys connotations of well-being, health and meaning. Large pot plants are placed on the landings of the staircase and near the foyer so as to introduce the character of the support centre to the individual as she walks up the stairs. Smaller plants are found within the counselling and therapy rooms and where there is a lack of sunlight or space there are large paintings of scenic and natural landscapes.

The abuse of women and trafficking proved to be rife within Durban city and many women are either unaware of help services available or afraid of cultural stigma that will be attached to them should they speak out. Prostitution and healthcare concerns such as HIV are interrelated and many women and mothers require assistance and support. Trafficking and prostitution is an immense problem within the city, many women resorting to the activity as a way of dealing with financial pressures. She also stated that many women spend most of their time moving through the streets of Durban and that the actual physical appearance of the area contributes to a lower self-perception of one's identity. Inadequate healthcare for women also proved to be a great concern as many women face hygiene problems which compromise quality of life or even cause fatality. This is found to be the case for many pregnant women within the city. Degee felt that her premises, although essentially a counselling centre, lacked healthcare and sufficient hygiene related facilities.

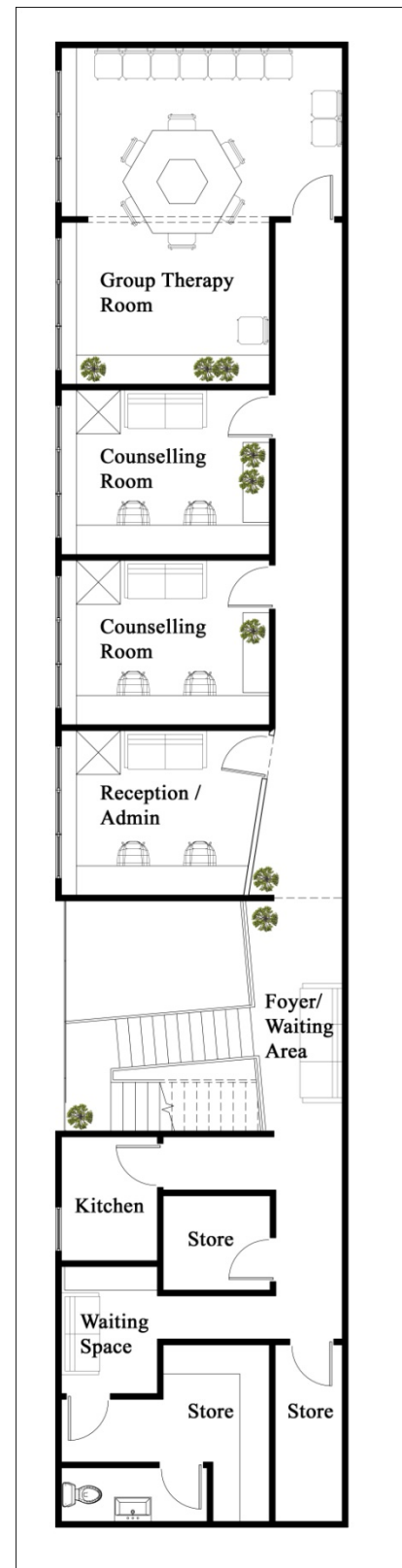


Plate 6.1 Planning layout of the support centre on the first floor of office block (Created by Author)

### **6.3 VULNERABILITY AND THE BUILT ENVIRONMENT**

Ms Saasha Singh, a qualified psychologist, revealed the cultural mechanisms and social dynamics that affect women within society and public spaces. When asked about the vulnerability of women, Ms Singh explained that every individual, regardless of sex, is prone to vulnerability. Women are however socially expected to express vulnerability more than men and as a result, a ‘self-fulfilling’ prophecy occurs and the expected action is performed. The researcher asked Ms Singh if a nurturing environment would be a positive influence towards the well-being of women. Ms Singh agreed, stating that if women are more likely to express their vulnerability, they are more likely to feel accepted and less stigmatised in an environment that allows them the freedom to express their emotions or concerns that predominate such as achieving work/family balance.

As the interest of this research is focused on supporting women within the built environment, various questions were asked regarding the planning layout of a therapy room and if women responded to space in a particular way. In terms of layout, very close proximity of both persons and objects may create a claustrophobic effect which would constrain the likelihood of a comfortable relationship. Too much open space however creates the sense of aloofness or detachment which may cause unease and less chance of confiding in another person. Women tend to prefer a “cosy” space rather than grand, impressive spaces when it comes to feeling comfortable with vulnerability. A chaotic space should be avoided.

With regard to solutions to the problem of vulnerability, Singh believes that the placement of recognisable, personal items within spaces can have many positive effects. A personal touch always creates a more intimate feeling and women tend to notice these things more in general. It also serves to avoid a cold, clinical atmosphere which is more threatening than comforting. Personal items reflect aspects of the individual’s personality and this contributes to a sense of familiarity. This aspect of making the foreign more familiar can be of great comfort to someone in a vulnerable state, particularly because vulnerable people find comfort in what is familiar and “safe” to them, so the threat of the unknown is lessened.

Singh explained that there are various environments which have negative and positive impacts on women. A dark environment without sufficient lighting or windows can be very threatening. Cold floors that may have the advantage of being clean often lack the soft

warmth that creates a feeling of comfort. If the environment seems chaotic or disorderly, it may also be intimidating, although on the other extreme, too much order and rigid designs are far more authoritarian. Very narrow spaces such as pathways can be very threatening. Rooms with no windows can lead to feelings of isolation and melancholy. Regarding successful environments, Singh suggested that adequate sunlight is most essential, and psychological studies have shown that natural sunlight deprivation can contribute to depression in those who are already vulnerable. Therefore large windows are beneficial, preferable with a garden view. Plants and paintings are a personal touch which mirrors parts of the person and can contribute to comfort. Softer furniture is helpful, and carpets create such a sense of warmth but are so often overlooked when designing spaces. With regard to planning, the environment in general should have more open spaces rather than constricting linear spaces. More openness may contribute to a sense of freedom of expression which women are often deprived of or have the perception that they are deprived of it. The environment should also contain a sense of warmth, because vulnerable people in particular already feel threatened in unfamiliar situations. If women can perceive a sense of safety it can make a large difference.

Ms Singh also made suggestions as to added functionality towards all buildings that could increase the quality of life of women. Specific rooms designated only to rejuvenation would be beneficial, other facilities such as yoga and meditation rooms. These can be particularly useful for women who get intensely emotionally involved with work and then need to detach themselves from the work situation in order to re-energise. Having spaces like this can help make stressful situations seem less complex. Feeling close to nature plays a big part in diverting from the corporate stress, therefore relaxation rooms can include large plants or glass walls containing fish tanks which many large corporate companies have invested in. Having a skylight in the ceiling can be very beneficial as well.

#### **6.4 WOMEN AND PUBLIC SPACE**

The data collected from the interviews reinforced much of the theoretical framework of the study. Suggestions put forth by Ms Singh highlighted the need for women to be able to identify design cues and elements which convey a welcoming and safe space. Design elements which induce feelings of familiarity within a space are particularly effective in reducing feelings of vulnerability. This aspect of familiarity and connection with a space, links to Rapoport's concept of the behavioural fit between an individual and a space

(Mthethwa, 2001:22). In order for women to feel completely comfortable, environments should also convey character and a distinct identity. These are factors which lead up to identifying meaning and the spirit of a place. Ms Singh and Mrs Degee revealed that the implementation of natural elements also reduced the perceived brutality of anonymous spaces. Planning which is free and passive is also crucial in reducing perceived feelings of vulnerability, an aspect which is encouraged by Wright through the use of organic design principles and democratic architecture(Wright, 1945:127).

The researcher interviewed men and women in an attempt to determine whether women would have different associations with spaces. The general consensus among female respondents was that public spaces were not supportive of all the needs required by various women (Figure 1).

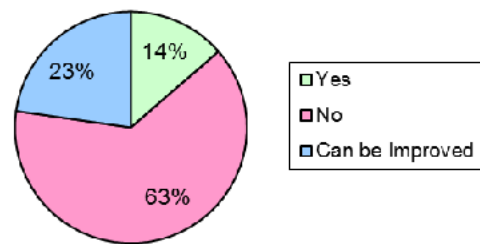


Figure 1. Comparitive chart of answers as to whether public spaces support all the needs of women.

## **FAMILIARITY**

A question within the general questionnaire asked respondents to describe their favourite most comfortable space. Scenic areas proved popular for all respondents whereas the home was chosen by many women. Female respondents also elaborated that their homes and individual workspaces offered a sense of familiarity and that it contained no hidden spaces. This aspect of safety against threats was absent in all of the male respondent's answers. Whether these safety concerns are a result of cultural stigma or not, it exists nonetheless. Various women explained that feelings of intimateness and content are also found to be associated with the home. The findings thus point towards a space which is meaningful, connects with the user, and offers optimal safety and familiarity. Although public spaces cannot be familiar in totality, various design treatments offer clues as to the function and character of the space.

Respondents of either sex believed that public spaces and buildings were not completely supportive of women. Many women stated that if there were no female healthcare amenities in spaces, they would avoid these spaces and feel out of place. A lack of ramps not only marginalises disabled individuals but also any persons utilising prams. The concern for the

welfare of infants substantiates the priority in making ramps integral to public areas and many women felt that ramps are often placed in secondary positions or as after thoughts when compared to main staircases, resulting in an alienating experience.

### 6.5 SAFETY CONCERNS

Safety again proved to be a vital influence in the answers of many respondents (Figure 2). Fear of sexual violence and aggression led to women stating that public toilets, elevators and narrow pathways were extremely intimidating. A few individuals stated that buildings and public spaces should reduce factors which increase feelings of vulnerability in women.

Visibility was a recurrent problem faced by many women who felt that objects and design features which obscure vision induces feelings of discomfort and uncertainty. Bathrooms, a necessity in all buildings, proved to be a place where many women felt unsafe and at times are even avoided. This conscious decision to avoid spaces impacts the quality of life for many women who feel vulnerable in public spaces.

Various female respondents suggested that restrooms for women should not be placed in the same passage as those for men. Many women also preferred low rise buildings and the complete absence of lifts as these were also areas where harassment could occur. An exception to this would be the implementation of transparent lifts, which increases natural surveillance and exposure.

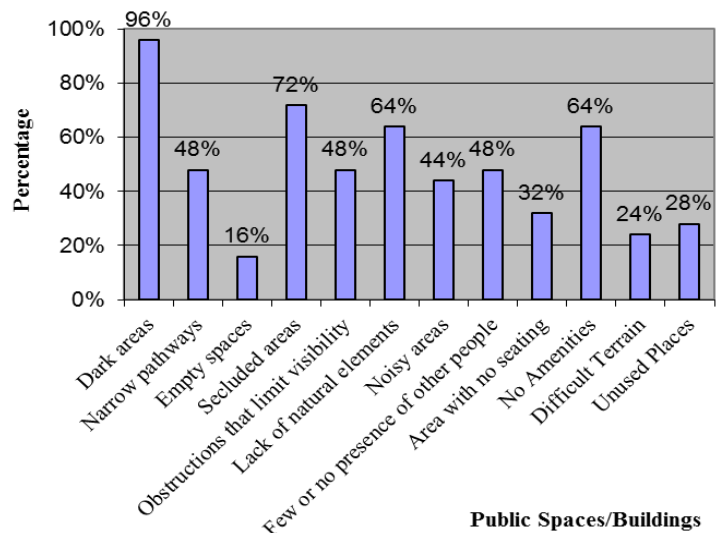


Figure2 Public buildings/spaces Women find most intimidating..

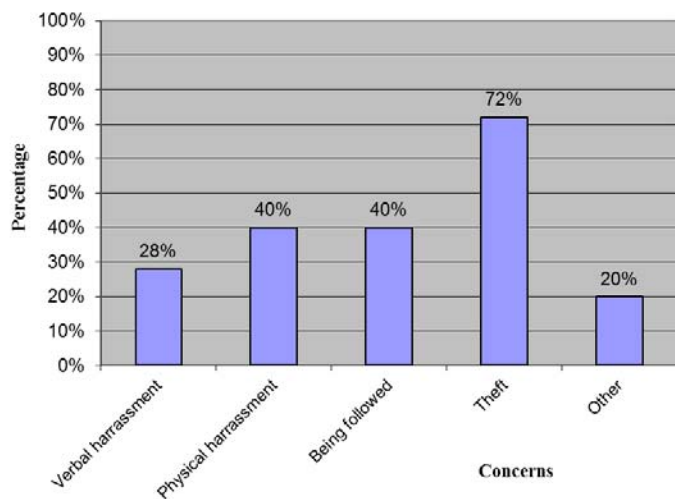


Figure 3 Concerns expressed by women.

Female respondents also stated that the cleanliness of the space also affects whether or not they feel comfortable in the setting. This could point towards materials and building techniques which contain durable and self-cleaning properties. This clean aesthetic is also linked towards lighting conditions whereby the shape and composition of rooms and spaces could induce darker areas which are unidentifiable or cause uncertainty in the viewer’s mind.

## BENEFICIAL FACTORS

The female and male respondents generated similar results as to what they find appealing in environments. Women however were almost always concerned with the sufficiency of amenities and visibility (Figure 4). Mothers with young children explained that safe public transport, healthcare amenities and after school facilities within working environments would increase their quality of life and add convenience (Figure 5). Various women and a female architect insisted that the multi-faceted lifestyle, which mothers of young children have, is currently unsupportive and that amenities which add convenience should be integrated into public environments.

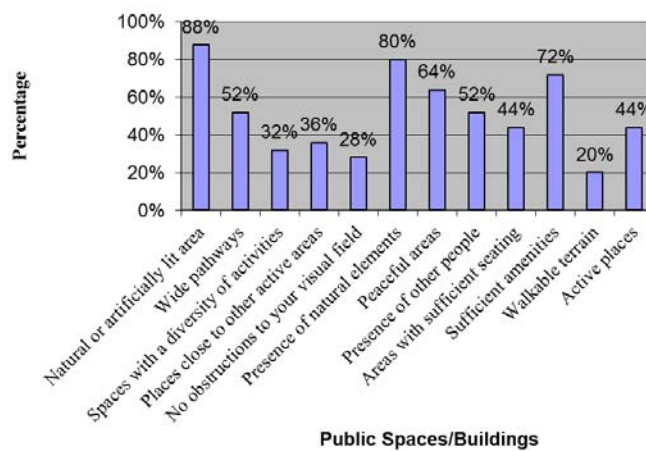


Figure 4 Aspects of the environment which women find appealing

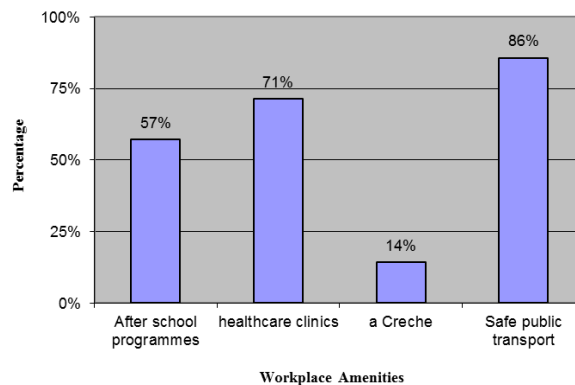


Figure 5 Amenities which would improve the quality of life for mothers.

The researcher performed observations in public spaces and engaged in casual conversations with women to determine how they felt their environment could be more supportive

## SAFETY

The researcher found through discussions that women find various places intimidating and unsafe. This occurred mainly in areas where visibility conditions were low and the number of people present were minimal. Concerns around waiting areas such as bus shelters were described as dangerous unless they were transparent which allowed for more visual surveillance (Plate 6.2). Many women perceived dangerous areas where harassment could occur, at the ‘backs’ of buildings. The blank facades of walls communicate a lack of human support and activity and induce feelings of discomfort and vulnerability (Plate 6.3). An interesting observation revealed that women displayed tense body language when walking in narrow pathways and corridors when the space was simultaneously used by man, a reaction which could imply a lack of comfort in the space as well as cultural stigma concerning harassment. A few female respondents stated that they felt more confident in spaces which contained wide walkways as they had more control over their own movements and that their personal space was not infringed as it is narrow pathways (Plate 6.4). Women are well aware of the consequences of spatial dynamics, and movement patterns often reflect this.



Plate 6.2 Transparent bus shelters (Author own image)



Plate 6.3 The blank facade is described as the ‘back’ of the building (Authors own image)

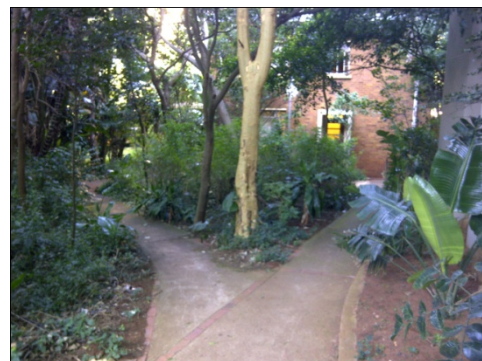


Plate 6.4 Narrow Pathways (Authors own)

## AESTHETIC TREATMENT AND CHARACTER

Many female respondents explained that they felt more freedom in certain environments than in others. Various buildings were described as ‘playful and free’ by women and contained dynamic elements which were unrestrained and informal. The Wits Science Stadium was a place where women explained that they felt more relaxed due to its informal spaces and that casual social interaction increased in areas of this nature (Plate 6.5). Mixed use environments, such as the Melrose Arch precinct, were deemed by women as attractive environments due to functional and visual diversity. The various buildings in the precinct utilise human scale proportions and objects to decrease the scale of the precinct. The scale of spatial elements was discovered to be a recurring factor of building design which women thought needed to be addressed. Floors and walls which contained markings and patterns are found to have reduced the scale of vast spaces and create for a more interesting and comfortable interface. The Melrose Arch precinct was understood as a safe, attractive and interesting environment. The precinct avoids monolithic and dominating structures and instead uses elements such as sunscreens to add detail and aesthetic to the face brick facades. The use of bollards and vegetation also constantly remind the user that the space prioritises human use. The avenues used by vehicles throughout the precinct consists of cobblestone paving, usually a surface utilised by pedestrians. (Plate 6.6).



Plate 6.5 The irregular columns within the Wits science stadium (Authors own image)



Plate 6.6. Design treatments within the Melrose Arch Precinct.(Authors own image)

## 6.6 CONCLUSION

The primary research conducted in terms of discussions, interviews and questionnaires revealed the viewpoints, challenges and recommendations of women within Durban. This data is consistent with the ideas and issues put forth in previous chapters. Women do claim to experience spatial inequality due to gender dynamics and feel that environments could be more supportive of the needs, lifestyles and challenges.

Various social problems such as trafficking and the domestic abuse of women revealed that discrimination and violence towards women is currently a major issue within the city of Durban and that support facilities which offer healthcare and empowerment are required. Cultural stigma stemming from problems such as these, also induce fear of public harassment and feelings of vulnerability in women. This aspect of vulnerability is related to the built environment as the character and spatial dynamics of space may induce feelings of discomfort, which then draw out other concerns such as personal safety.

The suggestions put forth by respondents and professionals regarding supportive spaces for women were very similar to the theoretical perspectives grounding this study. Women felt that their movements are compromised due to safety concerns, and desired more visible and spatial control over themselves and their immediate environment. These aspects are integral to the theory of Organic architecture which puts forth democratic design consideration regarding personal choice in movement within spaces. Many women believed that an environment which contained natural elements was also successful in achieving tranquillity and reducing feelings of discomfort and alienation, conditions put forth by organic architecture.

Familiarity with the environment proved that a meaningful and identifiable architecture is required to reduce feelings of vulnerability within women and to induce feelings of comfort and wellbeing. An environment which is meaningful to users creates a deeper connection between the user and the environment. This begins speaking about the compatibility and behavioural fit between users and their environment as put forth by Rapoport. Environments can also convey meaning by containing a distinct character or 'spirit'. Women were found to have an affinity for environments which contained distinct identities that reflected notions of safety, well-being and democracy.

## CHAPTER 7: CONCLUSION AND RECOMMENDATIONS

### 7.1 CONCLUSION

The study hypothesised,

*Conditions which are supportive towards women can influence the design of the built environment. Spaces are platforms where gender dynamics occur, architecture which is informed by these dynamics will influence the built environment so as to be more supportive of women.*

The findings of this research confirmed this hypothesis. Spaces convey power relations and induce socially accepted norms and activity. Many social and cultural norms are integral to gender roles, behaviour, stigma and related dynamics. As a result, there are various associations of women within public spaces, many of which produce a restriction of movement and feelings of vulnerability among women. These direct consequences are coupled with a lack of supportive infrastructure towards female lifestyles, challenges and needs to further alienate women within society. The careful and strategic design of environments which addresses the issues faced by females in society will produce an environment which is more supportive towards women.

The key question in this research investigation is: how do conditions which are supportive towards women influence the built environment? In order to grasp an understanding of this, a series of sub questions were investigated. The study began by investigating the nature of social dynamics which influence the associations of women within society. It was discovered that cultural associations of women historically placed them in a domestic or private domain due to reproductive ability and nurturing characteristics. These gendered roles were manifested into the built environments to assert power relations and maintain social order and control under patriarchal rule. As development, growth and power is found in the public domain, a restrictive cycle ensued among many cultures where women were unable to socially and physically gain access to public infrastructure and authority. These gender based social dynamics were exponentially perpetuated through the process of urbanisation, where the media, workplace and institutional processes continued to restrict and reform women's

place in society. These factors assimilated to produce various associations of women within public space which lead to harassment and violation of personal space, alienating women further.

The study then established that there are various positive conditions of built environments which are supportive towards women. Democratic architecture demonstrates how an environment allows individuals spatial freedom, choice in movement and passive use. Aspects of privacy and security were deemed vital components for an environment supportive of women. Buildings and spaces which granted the user spatial and visual control resulted in more comfortable and favourable use among female respondents. Mixed use public facilities are advantageous as it induces safety, diversity and convenience. Women avoid environments which induce vulnerability and therefore the scale and character of buildings are important design aspects. The scales of buildings and spaces also convey power relations and should convey human proportions and comforting characteristics. It can thus be said that built environments should contain an identity and character which is meaningful. These various and interrelated factors reinforce the notion that architecture which is informed by gender dynamics within spaces will produce a built environment which is more supportive of women

The precedents, case studies and primary research are indicative that the theoretical framework in place is conducive to conceiving an environment which is supportive of women. Environments should be supportive to women with regard to function, symbolism and identity. The theory of *genius loci* helped to understand and create a meaningful environments which convey characteristics of well being. Organic architecture is a crucial

Civic buildings and public environments were found to be appropriate building typologies which demonstrated the theoretical issues and argument presented in this research. By nature civic centres are conceived to serve and support communities and to embody beliefs and ideals put forth by the country. Civic centres are also political instruments which convey power relations within society. Clear identity and democratic design considerations regarding form and space produced civic environments which encourage female use due to increased spatial equality and freedom of movement. Public spaces which contained a casual and informal interface were also successful in encouraging usage by women.

The following information represents research findings and design conditions which utilises the results and conclusions produced by this study.

### **7.1.1 DEMOCRATIC SPACE**

The various issues and problems faced by women which have been investigated in this study stem from aspects of social inequality. Research shows that gender dynamics have restricted the quality of life and public involvement of many women. The spatial freedom of women has been compromised by threats of harassment, visual subjugation and intimidating environments. It is within the researchers beliefs that in order to provide a democratic environment which is supportive towards women, spatial design needs to consider the effects which gender dynamics have in public spaces. A space which is not rigid or organisational allows the user to make more of their own choices with regard to movement and also awards the user more control over themselves, the way they view others, and the way in which they themselves are viewed. This creates increases confidence, and indirectly would reduce feelings of vulnerability among women with regard to spatial stigmas such as harassment.

The idea of democracy and freedom of movement extends to the broader scale of movement throughout the city. Many women who are the caretakers of infants and children are not able to access certain facilities as they are not supportive of prams and small children. Consideration of facilities and infrastructure supportive of these factors will provide an environment which is supportive to all users and therefore encourage use by these women.

The aesthetic appearance and character of buildings also convey symbolism towards the user and it is important that the building should convey semiotics of a free and democratic society. In order for this association with freedom can be made, the forms and appearance of buildings should contain a unrestrained and casual composition. This deliberate step away from organisational control communicates to the user that diversity and free will is celebrated within the space. An environment without rational and strict design elements cannot classify and regulate as easily and as a result individuals within that environment will feel free and untainted by any predispositions associated with controlled and ordered spaces. Place-identity has also shown that a person's environment forms part of his or her self perception. An environment which communicates notions of freedom in choice, activity and behaviour will add perceptions on confidence and independence.

### **7.1.2 PRIVACY AND SAFETY**

Gender violence and the harassment of women are well known crimes in society and individuals are constantly reminded of threats through the media and social dynamics. The study has highlighted that a primary concern for many women is their safety for themselves, infants and children. Although spaces themselves do not manifest crime, spaces contain characteristics of associated behaviour. Public spaces by nature attract a variety of people who are not familiar with each other, personal space and privacy should not be a consequence.

Environments should therefore convey notions of a nurturing nature. A nurturing environment is one which prioritises the well being of its users. Environments which communicate notions of human interaction and functionality encourage more users which results in more surveillance. Overbearing buildings convey an alien and inhuman scale which can be intimidating and cause feelings of vulnerability which trigger other associations such as gender violence. The scale of spaces and buildings has proved to be a monumental factor in the way in which people experience spaces

There are various other ways of increasing safety within the built environment. Mixed use precincts encourage a diversity of users and activities which keep spaces occupied and full of natural surveillance for more hours during the day and night. The implementation of security personnel and surveillance desks within buildings monitors behaviour and serves as a protective presence within spaces. Visibility is a crucial factor and design should take cognisance of fields of vision so as to allow individuals to have more control.

### **7.1.3 MEANINGFUL AND NURTURING ENVIRONMENTS**

This research investigation has shown that environments convey meaning through symbolism and design characteristics which are then interpreted by the user. Only if these symbols are understood and identified by the user can associations be formed as to function and character of the space. Familiarity has proven to be a consistent factor of the built environment which induces favourable use by women. Familiar elements reveal trusted uses and associations and contain minimal unknown or threatening circumstances. The design techniques used in spaces should clearly demarcate entrances, movement paths and functions of the environment

so as to communicate a legible and easily interpretable space. Spaces which are not easily identifiable alienate individuals and could prompt concerns of discomfort and vulnerability in women. Utilising local materials, building techniques as well as the natural landscape as informants for design will harness the character of the space and will convey a true and meaningful identity to its users.

Various environments also have positive psychological effects on individuals such as nurturing spaces. Place identity theories show how environments have an impact on the way in which people perceive themselves and as a result a space conveying well being and sustenance will have positive influences. Natural spaces communicate growth and rigour and should be integral to softening buildings and

The building should tap into a larger context of public movement and participation and should therefore be close to areas where public related activities occur. It is also important that the area should be recognised as one of importance and significance, a cultural landmark should convey its message clearly and effortlessly. As the building is to be part of fostering a national identity it would advantageous to place the building in a central position within the city as it is here where the social norms of the ruling elite are practised, observed and enforced.

## **7.2 RECOMMENDED FUTURE RESEARCH**

It is within the author's view that there is not an adequate amount of literature and information regarding the marginalization of women's lifestyles with regard to the built environment. This stems from the relatively new acknowledgement of the connection between gender dynamics and architecture. The influence of gender dynamic on the built environment could be a research investigation on its own, and would yield results in an area of architecture which is largely overlooked. The results of this research indicate the complex and interrelated layers of supportiveness in the built environment towards women, each layer could be investigated so as to yield more information. More interviews and discussions with professionals regarding healthcare and supportive facilities would uncover more social and spatial dynamics



## REFERENCES

**Bay, E** (1982) *Women and Work in Africa*. Colorado.

**Benhabib, S** (1998) *Feminism, the public and the private. Oxford readings in Feminism*. Oxford university press. New York.

**Bradley, C** (1990) *Why male violence against women is a development issue: reflections from Papua New Guinea*. United Nations Fund for women, New York

**Carillo R.** (1992) *Battered Dreams: violence against women as an obstacle to development*. United Nations Fund for women, New York

**Crowe, T. D.** (2000). *Crime prevention through environmental design: applications of architectural design and space management concepts*. Boston. Butterworth – Heinemann.

**Fainstein, S** (2005) *Gender and planning: a reader*. Rutgers University Press

**Fenster, T** (1999) *Gender, Planning and Human Rights*. New York: Routledge.

**Findley, L** (2010) “*The Ubuntu Centre*” from *Architecture South Africa*. September/October. 2011.

**Haydon, D** (1986) *Redesigning the American Dream*. USA.

**Haydon, D** (1982) *The Grand Domestic Revolution*. London.

**Hillier, B** (1999) *Space is the Machine: A Configurational Theory of Architecture*. Cambridge University press.

**Koss, M Koss, P Woodruff J** (1991) *Deleterious effects of criminal victimization on women's health and medical utilization*. In *Archives of internal medicine*, 351 pp 342-347

**Lang Ho, C** (2003) *Collective construct. Rufisque Womens Centre*. in *Architecture*. September 2003 pp.70

**Lico, G** (2001) *Architecture and sexuality: The politics of Gendered space* in *Humanities Diliman* (January-June 2001) 2:1 pp 30-44.

**MacCormack** (1982) "Control of land, labor and capital in Rural Sierra Leone". From, *Women and Work in Africa* (Bay, 1982).

**Marschall, S** (2010) *How to honour a woman: gendered memorialisation in post – apartheid Douth Africa* in *Critical Arts: A South North Journal of Cultural and Media Studies*, Vol. 24 Issue 2, pp 260-283.

**Nager, A and Nelson-Shulman, Y** (1979) *Women in Public Places*. *Centrepont*. New York.

**Noble, J** (2004) *Architectures of Freedom*. In *Architecture South Africa*, July/ August: pp 20-21.

**Norberg-Shulz, C** (1980) *The Genius Loci: Towards a Phenomenology of Architecture*, Academy Editions, London.

**Ortner, S** (1974) *Is female to male as nature is to culture?* In Rosaldo, M and Lamphere, L (eds) *Woman, culture and society*, Stanford, CA:Stanford University Press, pp 68 – 87.

**Ostergaard, L** (1992) *Gender and Development a practical guide*. Routledge.

**Pollock, N** (2002) *Sekii Ladies Clinic. Furukawa, Miyagi, Japan* in *Architectural Record* no.7 2002 pp.136.

**Proshanksy, H** (1978) *The self and the City*. *Journal of Environment and behaviour*. Volume 10.

**Rapoport, A** (1969) *House form and culture*. University of Wisconsin.

**Rapoport, A** (1989) “Systems of activities and systems of settings”. In Kent, S. *Domestic architecture and the use of space and interdisciplinary cross cultural study*. Cambridge.

**Rapoport, A** (1995) *Thirty three papers in environment – behaviour research*. Pune.

**Rapoport, A.** (1990). *The Meaning of the Built Environment: A Nonverbal Communication Approach*. Tucson, AZ: University of Arizona Press.

**Rendell, J** (2000). *Gender Space Architecture: An interdisciplinary introduction*. London.

**Shah, R. C, Keshan, J.P** (2007) *How Architecture Regulates*. Journal of Architectural and Planning Research, 24(4).

**Shiva, V** (1988) *Staying Alive*. Women, Ecology and Development. London.

**Sinnot, R** (1985) *Safety and Security* in building design. London.

**Valentine, G.** (2004). Public space and the culture of childhood.  
*Aldershot*: Ashgate.

**Wasserman, V** (2012) *Open spaces, closed boundaries: transparent workspaces as clerical female ghettos*. From the International Journal, *Work Organisation and Emotion*, Vol. 5, No. 1. 2012.

**Wekerle G and Whitman, C** (1995). *Safe Cities: Guidelines for planning, design and Management*. New York, Van Nostrand.

**Wright, F** (1945) *When democracy builds*. University of Chicago.

## UNPUBLISHED RESOURCES

**Dame, T** (2008) *On making huge community change in UNHABITAT's Womens Safety Audits: What works and where?* 2008.

**Mthethwa, M** (2001) *A Study Of The Relationship Between Built Form And Culture: The Bulawayo Executive Mayors Residence And Its Environment*. A dissertation of the university of Cape Town.

**Varanda, F** (2004) *2004 On site report . Women's Centre: Rufisque, Senegal*.

## INTERNET ARTICLES

**Young, N** (2009) *World Village of Women Sports design awarded to team led by BIG*.  
[http://www.worldarchitecturenews.com/index.php?fuseaction=wanappln.projectview&upload\\_id=12584](http://www.worldarchitecturenews.com/index.php?fuseaction=wanappln.projectview&upload_id=12584). Page Title: Taking on the women of the world.

**Vachelli, E** (2005) *Gendering urban space in Berlin and Milan; a comparative perspective*.  
[http://www.academia.edu/566861/Gendering\\_urban\\_space\\_in\\_Berlin\\_and\\_Milan](http://www.academia.edu/566861/Gendering_urban_space_in_Berlin_and_Milan).

## ARCHIVED SOURCES

Plate 7.1 Floor plans of the Germiston Civic Centre.  
(Co-Arc International Architects Inc. 1972. Ground Floor Plan. [Drawing]. Civic Centre Project, DO 203-205. Archives, Johannesburg.

Plate 7.2. Ground Floor Plan of the healthcare facility. (Co-Arc International Architects Inc. 1972.)  
(Co-Arc International Architects Inc. 1972. Ground Floor Plan. [Drawing]. Civic Centre Project, DO 203. Archives, Johannesburg.

Plate 7.3 Ground Floor Plan of the Library (Co-Arc International Architects Inc. 1972.)

(Co-Arc International Architects Inc. 1972.Ground Floor Plan.[Drawing]. Civic Centre Project, DO 203. Archives, Johannesburg.

Plate 7.4 The public hall and adjacent lavatories (Co-Arc International Architects Inc. 1972.)  
(Co-Arc International Architects Inc. 1972.Ground Floor Plan.[Drawing]. Civic Centre Project, DO 204. Archives, Johannesburg.

Plate 7.5 The height of the chamber is gradually achieved and is not dominating over the surrounding built form. (Co-Arc International Architects Inc. 1972.)

## BIBLIOGRAPHY

**Bay, E** (1982) *Women and Work in Africa*. Colorado.

**Benhabib, S** (1998) *Feminism, the public and the private. Readings in Feminism*. Oxford university press. New York.

**Broadbent, G. Bunt, R. Jencks, C** (1980) *Signs, Symbols and Architecture*. Wiley: Chichester.

**Cooper, I** (2003) *Buildings, Culture and Environment*. Oxford.

**Crowe, T. D.** (2000). *Crime prevention through environmental design: applications of architectural design and space management concepts*, Boston.

**De Beauvoir, S** (1953) *The second sex*. Translated. Vintage books.

**Fainstein, S** (2005) *Gender and planning: a reader*. Rutgers University Press.

**Fenster, T** (1999) *Gender, Planning and Human Rights*. New York: Routledge.

**Findley, L** (2010) “*The Ubuntu Centre*” from *Architecture South Africa*. September/October. 2011.

**Gehl, J.** (1996). *Life between buildings: using public space*. Skive. Arkitektens Forlag.

**Gehl, J and Gemzoe, L** (2000). *New city spaces*. The Danish Architectural Press. Copenhagen.

**Gilman, C** (1966) *Women and Economic: A study of the Economic relation between men and women as a Factor in Social Evolution*. New York.

**Hall, S** (1992) “The Question of identity” in : Hall, Set al (Eds.), *Modernity and its Futures*, Polity, Cambridge, 1992,pp. 275 – 277.

**Haydon, D** (1986) *Redesigning the American Dream*. USA.

**Haydon, D** (1982) *The Grand Domestic Revolution*. London.

**Hillier, B** (1999) *Space is the Machine: A Configurational Theory of Architecture*. Cambridge University press.

**Jencks, C** (2006) *Theories and Manifestoes of Contemporary Architecture*. England.

**Kaplan, S and Kaplan, R** (1989).The experience of nature: A psychological perspective. *New York*. Cambridge University Press.

**Lang Ho, C** (2003) *Collective construct*. in *Architecture* September 2003 pp.70

**Loukaitou-Sideris, A. and C. Flink** (2009) *Settings: A Survey of U.S. Transit Agencies Addressing Women's Fear of Victimization in Transportation*, *Urban Affairs Review*, 44, 4, pp. 554-588.

**Lico, G** (2001) *Architecture and sexuality: The politics of Gendered space*. *Humanities Diliman* (January-June 2001) 2:1 pp 30-44.

**MacCormack** (1982) “Control of land, labor and capital in Rural Sierra Leone”.From, *Women and Work in Africa* (Bay, 1982)

**Marschall, S** (2010) *How to honour a woman: gendered meorialisation in post – apartheid Douth Africa* in *Critical Arts: A South North Journal of Cultural and Media Stuides*, Vol. 24 Issue 2,pp 260-283

**Mbeki, M** (2011) *Advocates for change: how to overcome Africa’s challenges*. Johannesburg

**Mayer, P** (1971) *Townsmen or Tribesmen: Conservation and the process of Urbanization in*

*a South African City*, Oxford university Press, Cape Town, London, New York and Toronto, 1971.

**Murray, N Shepard, N Hall, M** (2007) *Desire lines: Space, Memory and identity in the post-apartheid city*. New York

**Nager, A and Nelson-Shulman, Y** (1979) *Women in Public Places. Centrepoin*t. New York

**Noble, J** (2004) *Architectures of Freedom*. In *Architecture South Africa*, July/ August: pp 20-21.

**Norberg-Shulz, C** (1980) *The Genius Loci: Towards a Phenomenology of Architecture*, Academy Editions. London.

**Ortner, S** (1974) *Is female to male as nature is to culture?* In Rosaldo, M and Lamphere, L (eds) *Woman, culture and society*, Stanford, CA:Stanford University Press, pg 68 – 87.

**Ostergaard, L** (1992) *Gender and Development a practical guide*. Routledge.

**Paravicini, U** (2003) *Public spaces as a contribution to egalitarian cities, city and gender*. Hemsbach.

**Phillips, D** (2004) *Daylighting. Natural light in architecture*. Oxford

**Pollock, N** (2002) *Sekii Ladies Clinic. Furukawa, Miyagi, Japan* in *Architectural Record* no.7 2002 pp.136

**Proshansky, H** (1978) *The self and the City*. *Journal of Environment and behaviour*. Volume 10.

**Rapoport, A** (1969) *House form and culture*. University of Wisconsin.

**Rapoport, A** (1989) “Systems of activities and systems of settings”. In Kent, S. *Domestic architecture and the use of space and interdisciplinary cross cultural study*. Cambridge

**Rapoport, A** (1995) *Thirty three papers in environment – behaviour research*. Pune.

**Rapoport, A.** (1990). *The Meaning of the Built Environment: A Nonverbal Communication Approach*. Tucson, AZ: University of Arizona Press.

**Robson, D** (2007) *Beyond Bawa*. London.

**Rendell, J** (2000). *Gender Space Architecture: An interdisciplinary introduction*. London.

**Shiva, V** (1988) *Staying Alive. Women, Ecology and Development*. London.

**Sinnot, R** (1985) *Safety and Security in building design*. London.

**Vachelli, E** (2005) *Gendering urban space in Berlin and Milan; a comparative perspective*.

**Vale, L** (1992) *Architecture, Power and National Identity*. Yale.

**Valentine, G.** (2004). *Public space and the culture of childhood*.  
*Aldershot: Ashgate*.

**Wasserman, V** (2012) *Open spaces, closed boundaries: transparent workspaces as clerical female ghettos*. From the International Journal, *Work Organisation and Emotion*, Vol. 5, No. 1. 2012.

**Wekerle G and Whitman, C** (1995). *Safe Cities: Guidelines for planning, design and Management*. New York, Van Nostrand

**Wright, F** (1945) *When democracy builds*. University of Chicago

## **APPENDIX**

Sample of Focused Interview:

**SUPPORTING WOMEN WITHIN THE BUILT ENVIRONMENT:**

A Design Proposal for a Civic Centre for Durban

**Background:** *This study seeks to determine ways in which buildings and spaces can be more supportive of women. This supportiveness is in terms of how well a woman engages and interacts with a space. The character of an environment often induces feelings within the user and this determines the quality of the experience within a space. Many public buildings and environments do not contain a safe, functional, meaningful and comfortable interface and as a result these spaces deter the use of many women. As a result many women avoid public environments and this induces feelings of alienation and exclusion.*

**Interview:**

1. As a psychologist you often deal with people who are in a vulnerable emotional state. Do you feel that women in particular, as a result of cultural and social dynamics such as stereotypes and roles, are often in a state of vulnerability?

2. Place-identity is said to be a component of what develops an individual's perception of themselves. As an individual grows, associations are developed with environments that one experiences, be it enjoyable or uncomfortable. Do you believe that a nurturing, comfortable environment will aid in positive self-perception for vulnerable women?

3. Do you feel that the planning layout of consultation rooms plays a role in how comfortable a woman is in it? Are there any planning conditions you feel are directly linked to women?

4. An environment contains many elements which convey signals to its users as to the function and character of the space. Do you believe that adding personal items and objects in consultations rooms creates a more intimate atmosphere which will then have a comforting effect on vulnerable women? Please elaborate.



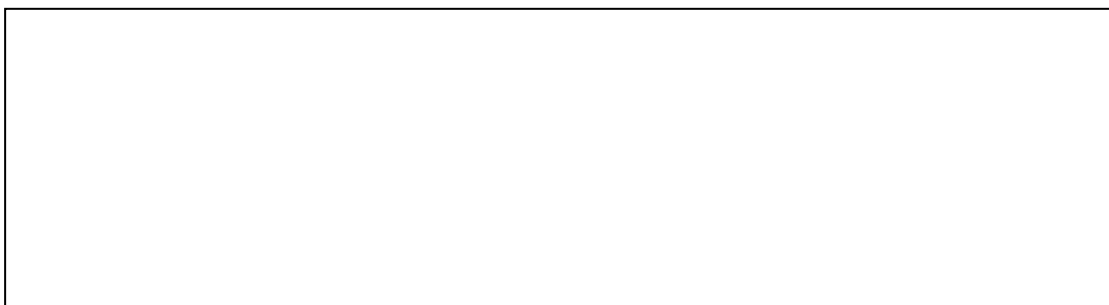
5. What factors within a building do you feel would be intimidating towards women?



6. What elements within your consultation rooms (for example plants, natural lighting etc) do you feel makes vulnerable women feel more comfortable and at ease.



7. People experience environments and their world through their senses. With regard to the interior design of your consultation rooms, what colours and materials convey associations of comfort and warmth to vulnerable women?



8. Do you believe that the appearance of your premises plays a role in how women perceive your practice or how approachable it is?

9. What characteristics do you feel an environment should contain with regard to supporting women?

10. Are there any other conditions or recommendations that you would like to add which would improve environments and quality of life with regard to women?

**Name of Respondent:**

**Date:**

Sample of Questionnaire for female respondents:

## SUPPORTING WOMEN WITHIN THE BUILT ENVIRONMENT:

### A Design Proposal for a Civic Centre for Durban

**Background:** *This study seeks to determine ways in which buildings and spaces can be more supportive of women. This supportiveness is in terms of how well a woman engages and interacts with a space. The character of an environment often induces feelings within the user and this determines the quality of the experience within a space. Many public buildings and environments do not contain a safe, functional, meaningful and comfortable interface and as a result these spaces deter the use of many women. Therefore many women avoid public environments and this induces feelings of alienation and exclusion.*

#### Questionnaire:

Answer questions as they relate to you, please check boxes where applicable or fill in the blanks where provided

- No identification or contact information is gathered in this questionnaire
- The questions contained in this questionnaire are for the purpose of the thesis only
- If there are any queries , please email me at; [brijesh89.g@gmail.com](mailto:brijesh89.g@gmail.com) or my supervisor at [mthethwam@ukzn.ac.za](mailto:mthethwam@ukzn.ac.za)

---

### SECTION 1: PERSONAL INFORMATION

#### 1. Age group

- |                          |                          |                          |               |
|--------------------------|--------------------------|--------------------------|---------------|
| <input type="checkbox"/> | Teenager (13-19)         | <input type="checkbox"/> | Adult (20-59) |
| <input type="checkbox"/> | Pensioner (60 and older) | <input type="checkbox"/> |               |

#### 2. Occupation

- |                          |          |                          |            |
|--------------------------|----------|--------------------------|------------|
| <input type="checkbox"/> | Student  | <input type="checkbox"/> | Unemployed |
| <input type="checkbox"/> | Employed | <input type="checkbox"/> | Pensioner  |

#### 3. Education

- |                          |                        |                          |            |
|--------------------------|------------------------|--------------------------|------------|
| <input type="checkbox"/> | Grade 10 or less       | <input type="checkbox"/> | Grade 12   |
| <input type="checkbox"/> | Technikon              | <input type="checkbox"/> | University |
| <input type="checkbox"/> | Other (Please specify) |                          |            |

#### 4. Race

- |                          |       |                          |        |
|--------------------------|-------|--------------------------|--------|
| <input type="checkbox"/> | Black | <input type="checkbox"/> | Indian |
| <input type="checkbox"/> | White | <input type="checkbox"/> | Other  |

#### 5. Religion

- |                          |           |                          |        |
|--------------------------|-----------|--------------------------|--------|
| <input type="checkbox"/> | Christian | <input type="checkbox"/> | Muslim |
| <input type="checkbox"/> | Hindu     | <input type="checkbox"/> | Other  |

## SECTION 2: WOMEN AND THE BUILT ENVIRONMENT

### 1. What six aspects of public buildings and spaces do you find most intimidating/unwelcoming ?

<input type="checkbox"/>	Dark areas	<input type="checkbox"/>	Noisy areas
<input type="checkbox"/>	Narrow pathways	<input type="checkbox"/>	Few or no presence of other people
<input type="checkbox"/>	Empty spaces	<input type="checkbox"/>	Areas with no seating
<input type="checkbox"/>	Secluded areas	<input type="checkbox"/>	No amenities ( bathrooms, shelter etc)
<input type="checkbox"/>	Obstructions that limit visibility	<input type="checkbox"/>	Terrain which is difficult to walk on
<input type="checkbox"/>	Lack of natural elements (sunlight, plants etc)	<input type="checkbox"/>	Unused places

### 2. What six aspects of public buildings and spaces do you find most appealing?

<input type="checkbox"/>	Sufficient natural or artificial lighting	<input type="checkbox"/>	Peaceful areas
<input type="checkbox"/>	Wide pathways	<input type="checkbox"/>	The presence of other people
<input type="checkbox"/>	Spaces with a diversity of activities	<input type="checkbox"/>	Areas with sufficient seating
<input type="checkbox"/>	Places close to other active areas	<input type="checkbox"/>	Sufficient amenities ( bathrooms, shelter etc)
<input type="checkbox"/>	No obstructions to your visual field	<input type="checkbox"/>	Terrain which is easy to walk on
<input type="checkbox"/>	The presence of natural elements (Sunlight, plants etc)	<input type="checkbox"/>	Active places

### 3. Pick two of the following concerns that you have when venturing out in public buildings/spaces as a woman?

<input type="checkbox"/>	Verbal harassment
<input type="checkbox"/>	Physical harassment
<input type="checkbox"/>	Being followed
<input type="checkbox"/>	Theft
<input type="checkbox"/>	Feeling isolated/alienated

### 4. Do you believe that public buildings and spaces cater for all the needs of women?

---

---

---

*If you are a mother of young children or infants please answer question 5 and 6. if not please proceed to question 7*

**5. If the following amenities were provided in a safe environment in or nearby to your workplace/institute would the quality of your life improve? Please tick amenities which you would use**

- After School programmess
- Healthcare clinics
- A crèche
- Safe public transport

**6. Do you avoid using various public spaces because you feel that they are not friendly or physically supportive of your infants/children?**

Yes

No

**7. Do you believe that women are more vulnerable in public buildings and spaces than men?**

Yes

No

**8. Many spaces contain natural elements as they create a calming and attractive atmosphere. Which two elements do you find most appealing?**

- Lawns
- Water features/ fountains
- Natural light
- Trees, plants and vegetation

**9. Do you believe that women have lifestyles and behavioural patterns which public buildings do not consider?**

Yes

No

**10. What do you consider to be your favourite place? Please describe the place in terms of its character, materials, layout and furnishing. Why have you chosen it as your favourite?**

---

---

---

---

**11. Do you have any other recommendations that would aid in making environments more supportive towards women?**

---

---

---

---

**Thank you for your time**

PART TWO  
**DESIGN REPORT**

# **CHAPTER 1: INTRODUCTION**

## **1.1 INTRODUCTION.**

This document serves to demonstrate the manner in which the research findings outlined in part one of the dissertation have been utilised to inform and guide the design process of a proposed building. The brief for a civic support centre was established through informants from the literature review and primary research conducted by the researcher.

The grounding concept of ‘sustainable support’ was formulated by the researcher to guide the design process. This concept aims to allow for a self supporting system to be available to women that responds directly to needs and challenges. Socially restrictive systems such as patriarchy, colonialism and apartheid produced stigma regarding the involvement of women within society. These systems have manifested power relations and gender dynamics into the built environment and related infrastructure. Due to embodying beliefs from these systems which marginalized females, the resultant spaces remain largely unsupportive of women’s needs and lifestyles. Women are thus often alienated within the urban fabric, affecting freedom of movement and social involvement.

The ability for the design to foster an identity containing notions of safety and sustenance was proved to be imperative for supporting women. A meaningful and nurturing identity as well as containing a safe and functional interface were deemed to be important guiding factors in the design process. Various sustainable techniques and strategies were utilised in accordance with the concept to produce a building which harnesses its natural surroundings. The resultant support centre houses mixed use facilities on ground level, a temporary residential shelter for abused women, research centre, and support facility on upper levels. The dynamics and spatial mechanics of the building allow for a support structure which is easily accessible and user friendly. The building also contains meaningful spaces which uplift vulnerable women and reconstruct a healthy and positive self identity.

## **1.2 THEORETICAL FRAMEWORK.**

The researcher chose Genius Loci and Organic architecture as key theories to guide the design process as these were relevant and proven approaches to creating meaningful and nurturing environments which respond to the challenges faced by women

### 1.2.1 Genius Loci

Many researchers have observed that women desire environments that convey meaning and a level of intimacy, this is deemed to be a solution for anonymous and homogenous spatial conditions which induce anxiety among women.(Wasserman, 2012:6). Norberg - Schulz states that people require and desire meaningful architecture in which to truly engage and interact with. These places have a metaphysical character and atmosphere called *genius loci* or the ‘spirit’ of a place. There are three categories through which *genius loci* can be understood and interpreted; romantic, cosmic and classical (Norberg-Schulz, 1980:69). The *romantic* classification relates to the unrestrained character and mysterious connotations of a place and draws its meaning from being dynamic and ‘alive.’ The place seems to achieve its character from the landscape and the dialogue between raw elements in nature. Romantic spaces are free from organisational control, and its meaning is illogical and indefinable yet prominent nonetheless. The dynamic nature of light is used to form and animate characteristics as opposed to the physical forms themselves. These places draw their existential qualities through the natural world and its elements (Norberg-Schulz, 1980:69)

*Cosmic* architecture refers to man-made environments that manifest through logic, organisational control and definable structures. These environments create order which can be identified by various cultures as being political or social systems which classify and define boundaries, inclusion and exclusion. This form of architecture does not exude notions of *genius loci* on its own and must assimilate with another category if existential meaning is to be achieved (Norberg-Schulz, 1980:71).

*Classic* architecture is understood as an articulation of various elements, often on a larger scale. This refers to the characteristics of streets and settlements as opposed to spaces in individual buildings. These articulated landscapes can therefore contain a dynamic and animated character as the different activities and movements of people produce an atmosphere, even if various buildings are static and rigid (Norberg-Schulz, 1980:73). It is stated that spaces such as these offer a democratic freedom in that there is no unquestionable system in place determining rational set factors and elements. These settings form their own ‘organic’ presence, a living entity with its own constituent parts which functions separately yet eventually link together. (Norberg-Schulz, 1980:74)

These classifications are rarely found in isolation and *Complex* architecture is the term used by Norberg-Shulz to define the circumstance when all three classifications are assimilated and evident (Norberg-Shulz, 1980:75).

### 1.2.2 Organic Architecture

The link between woman and the natural environment is well known and transcends the mere reproductive association. In Indian cosmology, the female principle is known as *Prakriti* and is synonymous with Mother Nature, representative of a playful and spontaneous entity. This primordial entity creates a diversity of living and non-living forms. The inanimate world however is not a lifeless shell, the rivers and mountains also contain a hidden consciousness (Shiva, 1988:39). *Prakriti* is also said to have created complimentary factors, where the living and non-living creations require each other in order to exist, there is no distinction between the two. (Shiva 1988:41).

Wright put forth the idea that all parts in an organic system are equal and that the part is as important to the whole entity as the whole entity is to the part. Using this deduction Wright states that man should incorporate nature in his plans of development as this is the only way forth as an organic whole (Wright, 1945:127). This integration and importance of every individual in relation to each other and their environment is why Wright calls the organic architecture, the architecture of democracy. Organic architecture is a philosophy which promotes a harmony between human habitation and the natural world through sensitive design approaches. A building is to be so well integrated with its surroundings through careful design that its furnishes and form become part of the context. Schulz states that in order to produce an effective and meaningful space, the character and essence of the natural surroundings must be captured (Schulz, 1971:31)

This theory is relevant to the study at hand as many spatial systems which have historically restricted women manifest their dividing characteristics through the process of boundary formation and unquestionable distinctions between zones. Organic architecture is a process which softens the distinction between the living and non-living and as a result produces an unrestrained and 'free' natural environment (Wright, 1945).

### **1.3 BRIEF AND ACCOMODATION SCHEDULE.**

#### **1.3.1 Informants of the choice in clients and design brief**

The choice in clients and design brief was informed by both the literature review as well as the secondary research conducted by the researcher. The literature review and precedent studies directed the researcher towards the proposal of a support centre and temporary residential facility which offers a nurturing and passive interface that welcomes women and is sensitive to the challenges experienced by females. Interviews with professionals informed the researcher of the various social problems which require a stable support structure. Mrs. Gloria DeGee, the director of the Shiloh House of Hope for abused women, revealed the various issues and problems faced by women within the city of Durban. Abuse, rape, trafficking and prostitution proved to be rife within the area and there was a lack of response in terms of supportive facilities and amenities. The following brief was then implemented.

#### **1.3.2 Clients**

In response to the issue at hand, as well as taking into account the concept of *sustainable support*, there will be a variety of clients which will be accommodated within the proposed building. These facilities will offer distinct services to women yet will all form part of a sustainable system which seeks to support and empower women.

1. **POWA** – People opposing women abuse. POWA is a non-governmental organisation which undertakes research into gender – based violence in Africa. The organisation campaigns on particular aspects of women’s rights at a time in order to galvanise the focus of society to specific challenges.
2. The **Shiloh House of Hope** is a crisis centre which seeks to aid and support women in vulnerable circumstances. Elderly, abused and harassed women are offered counselling and a temporary premises to stay.

#### **1.3.3 Detailed Brief**

A proposed civic support centre which is responsive to issues and challenges faced by women is the appropriate building typology which serves as a vehicle to demonstrate the research findings put forth by the document. The Civic support centre will be guided by the following main anchor components and requirements;

1. A ground level which offers a crèche, exhibition space and minor retail stores which generate urban life and social activity. The ground level itself is to act as a device

which draws in women and families and ultimately introduces women to the support centre on the upper floors. Retail outlets could be orientated towards the economic empowerment of women by selling the crafts produced by the women in the workshops on upper floors. In physical terms the ground level is to be passive and sensitive to disabled women and individuals utilising prams.

2. An upper residential wing which constitutes temporary housing facilities for abused women and meaningful spaces which inspire and nurture these individuals. This region is to be designed for the Shiloh House of Hope. Access to this place of safety is to be accessed via the support centre and through a security facility on the basement level.
3. An upper support centre offering amenities which respond to issues faced by women ie. Trauma counselling for abuse, legal aid for empowerment and various vocational assistance services. As the nature of the amenities varies, an appropriate positioning of the programme should be investigated.
4. A research level to be designed for POWA (people opposing women abuse) including staff, lecture room and research facilities. This facility is to be situated within accessible distance to the exhibition space on ground floor in order to maximise movement between the two spaces.

General requirements include creating a response which has a delicate atmosphere that is inviting to vulnerable women. Movement through the building should be an uplifting experience which

#### 1.3.4 ACCOMMODATION SCHEDULE.

					AREA [M <sup>2</sup> ]	QUANTITY	TOTAL [M <sup>2</sup> ]
Total area							7185
<b>Basement parking total</b>							2000
<b>Ground floor total</b>							985
	<b><u>Coffee shop and book store</u></b>						<b>140</b>
		Seating area			90	1	90
		Kitchen			30	1	30

		Pantry			10	1	10
		Ablutions			10	1	10
	<b><u>Foyer to research instiitute</u></b>	-	-				<b>120</b>
		Entrance			75	1	75
		Admin room			10	1	10
		Ablutions			10	1	10
		Lobby space			25	1	25
	<b><u>Exhibition space</u></b>						<b>100</b>
	<b><u>Craft store</u></b>						<b>25</b>
	<b><u>Textile store</u></b>						<b>25</b>
	<b><u>Restaurant</u></b>	-	-				<b>150</b>
		Seating area			80	1	80
		Kitchen			35	1	35
		Preperation			20	1	20
		Pantry			15	1	15
	<b><u>Foyer to support centre</u></b>	-	-				<b>120</b>
		Entrance			75	1	75
		Admin room			10	1	10
		Ablutions			10	1	10
		Lobby space			25	1	25
	<b><u>Creche</u></b>	-	-				<b>155</b>
		Foyer			35	1	35
		Play area			70	1	70
		Book corner			10	1	10
		After school care			20	1	20
		ablutions			20	1	20
	<b><u>Organic food store</u></b>	-	-				<b>150</b>
		Seating area			80	1	80
		Kitchen			35	1	35
		Preperation			20	1	20

		Pantry			15	1	15
<b>First floor total</b>							<b>1075</b>
	<b><u>Research centre</u></b>	-	-				<b>535</b>
		lecture room large			100	1	100
		lecture room small			50	1	50
		ablutions			55	1	55
		staff room			25	1	25
		lobby			30	2	60
		library			205	1	205
		CPU lab			40	1	40
	<b><u>Residential units</u></b>	-	-				<b>540</b>
		3 bedroom unit			55	2	110
		2 bedroom unit			35	2	70
		green corridor			55	1	55
		lobby			30	2	60
		solarium front			115	1	115
		zen garden			105	1	105
		kitchen			25	1	25
<b>Second floor total</b>							<b>1075</b>
	<b><u>Support centre</u></b>	-	-				<b>535</b>
		workshop 1			25	1	25
		workshop 2			25	1	25
		waiting area			20	1	20
		security control			20	1	20
		ablutions			55	1	55
		legal aid			50	1	50
		vocational assistance			40	1	40
		occupational therapy			50	1	50
		library			195	1	195
		cpu lab			40	1	40
		records room			15	1	15

	<b><u>Residential units</u></b>	-	-				<b>540</b>
		3 bedroom unit			55	2	110
		2 bedroom unit			35	2	70
		green corridor			55	1	55
		lobby			30	2	60
		solarium front			115	1	115
		zen garden			105	1	105
		kitchen			25	1	25
<b>Third floor total</b>							<b>1050</b>
	<b><u>Support centre</u></b>	-	-				<b>500</b>
		gallery			25	1	25
		waiting area			20	1	40
		security control			20	1	20
		ablutions			55	1	55
		trauma counsellor			50	3	150
		art therapy			50	1	50
		yoga room			80	1	80
		reflexologist			80	1	80
	<b><u>Residential units</u></b>	-	-				<b>505</b>
		3 bedroom unit			55	2	110
		2 bedroom unit			35	2	70
		green corridor			55	1	55
		lobby			30	2	60
		solarium front			80	1	80
		zen garden			105	1	105
		kitchen			25	1	25
<b>Roof garden</b>							<b>1000</b>

## CHAPTER 2 : SITE SELECTION

### 2.1 SITE SELECTION

The chosen site is well located within the city centre and is situated adjacent to Gugu Dlamini Park, a historically prominent area. In terms of locality in the broad sense, the site is accessible from Warwick junction, bus stops and taxi terminals as well as through the use of acknowledged pedestrian routes by ethekwini. Prominent buildings within the vicinity are the workshop, the virgin active gym, tourism building, church square market and the city hall. The site is therefore very public and is situated in an area which contains a mixed use of activities and draws in a diversity of people. The major pedestrian routes along the site ensure a safe fabric in which to implement an intervention regarding women.



FIGURE 1 Location of selected site

## **2.2 JUSTIFICATION OF SITE**

The site is within a socially significant area, whatever conditions it contains, it reinforces within the public eye. Whatever is considered important to the people of Durban is found within the city centre. A goal which Durban, and any other city in South Africa strives towards, is to generate its own national identity to represent the post colonial and postapartheid values and beliefs which the country embodies. As the restriction and oppression of women was an immense problem throughout the history of the country, the researcher feels that an intervention reflective of the resultant and current issues could be situated within this area.

## **2.3 OPPORTUNITIES PRESENT ON SITE**

The site is quite large and unused at present. Current plans for a science exhibition centre and a new civic library hint at the city's intent of fostering a new dynamic identity. The site is empty however and an urban intervention is needed in order to maximise the potential of the space. There currently exists a superbasement allowing the entire surface area above to be fully pedestrian. Church Street runs through the site as is often depicted by the municipality as having potential to form a vista towards the harbour and encompassing the city hall.

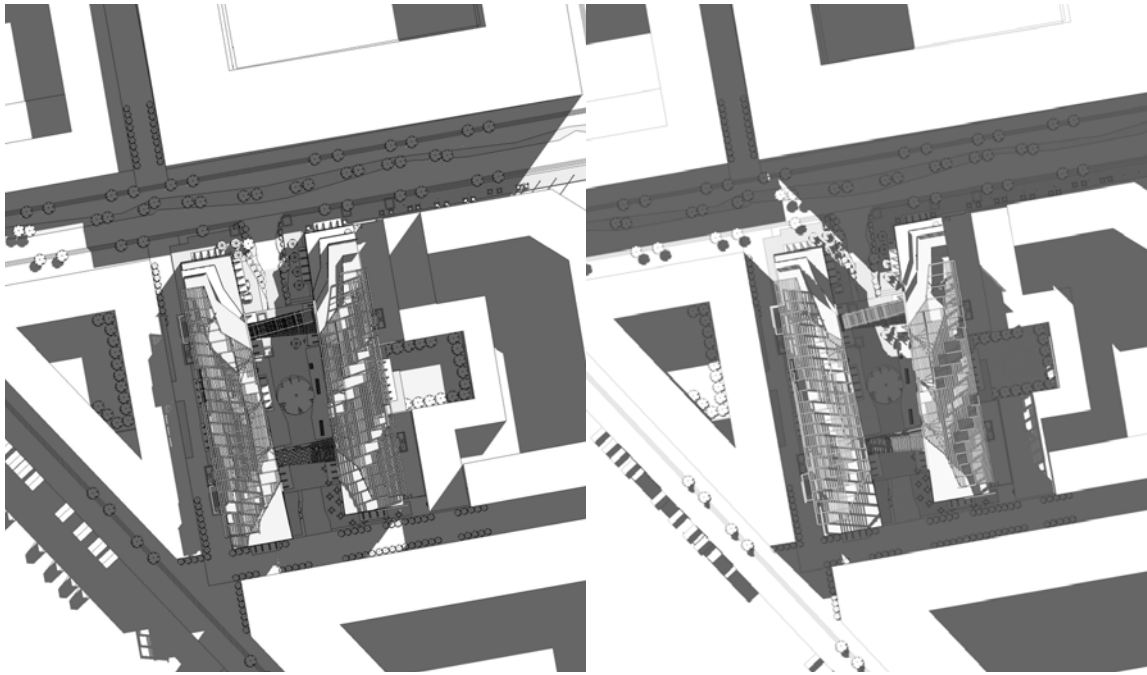
There are a few existing conditions which need to be considered. To the north of the site there is a Shembe worshippers temple, to the east there is the Gugu Dlamini Park Precinct and existing buildings include the workshop and the Virgin Active gym. There is also a unique trading element found on site and is full of public life at various times throughout the day. The existing central pedestrian path is well known and used frequently, statistics show that the majority of pedestrians in the city are women, an interesting find which highlights the importance of the issue at hand.

## **2.4 ENVIRONMENTAL STUDY/ PERFORMANCE**

### **Sustainable design**

The building makes use of various sustainable technologies and strategies in order to harness the natural surrounding environment. Rainwater harvesting is achieved by collecting all excess water on the green roof and transporting it through to the collection tanks on the basement level. This water is to be utilised as greywater within all the ablutions found in the proposal. Filtration methods will depend on where the water has been collected from

The various facades within the building will benefit from solar shading via the use of composite timber cladding. Composite timber does not deteriorate as much as wood and retains its structural integrity and appeal. This cladding limits the amount of heat gain in a hot area such as Durban. Where there is exposed glass however, double and triple glazing will be utilised to



**Figure 2 Typical morning solar study (top left) and typical afternoon solar study of the proposed support centre and its surrounding context.**

### **Sustainable components and materials**

The choice in components and materials also has a major influence in the performance of the building. Light emitting diodes (LED) lights are currently a breakthrough in the lighting industry. Their long lifespans and durability make them the sustainable option when selecting lighting components. All paints are to be VOC free in order to create a healthy environment. Where possible, PVC pipes will be utilised over metal tubing as its interior surface is not biodegradable and operating and maintenance costs are minimal.

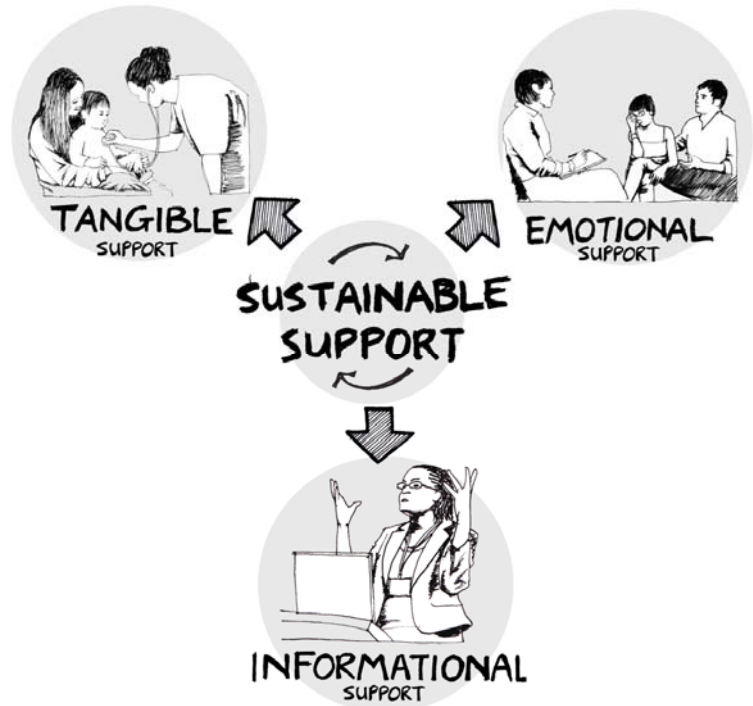
Recycled materials are to be used where applicable within the proposed building. The residential units in the Shiloh house of hope are to utilise recycled carpets. These carpets have all the standards and quality of regular carpet tiles, but with recycled content. The product is constructed from recycled polyester made out of PET plastic bottles integrated with a polypropylene blend to produce an environmentally friendly top cloth.

Where timber must be used in the building, bamboo will be the preferred choice as it is a self-regenerating rapidly renewable resource taking five years to reach full maturity as opposed to the usual 60 years for the average tree.

## CHAPTER 3 : DESIGN DEVELOPMENT

### 3.1 CONCEPT

In response to the issues at hand the researcher formulated the concept of 'sustainable support.' The concept centres around three distinct yet interrelated levels of support; tangible, emotional and informational (fig 1). These three tiers of support function simultaneously to provide a sustainable support structure with regard to women in need. Providing



assistance through these three levels allows the individual to heal as well

Figure 3. The researcher formulated the concept of Sustainable support.

as become self sustainable. Through the provision of physical amenities, a nurturing environment and educational opportunities, support can be offered to women in need of help. The mechanics of these levels are explained and manifested through architecture as follows:

#### Tangible

The first level of support, tangible support, refers to the physical manifestation of amenities such as a crèche, legal aid, physicians, trauma counsellors and workshop premises. The tangible portion of support also refers to

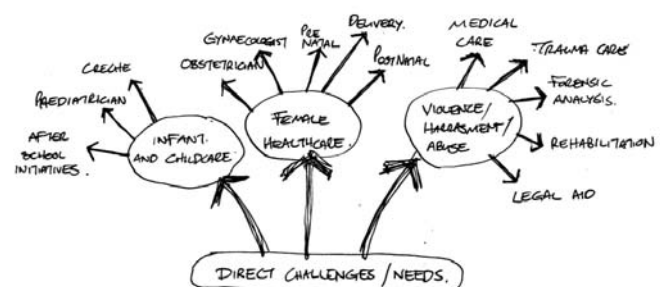


Figure 4 Tangible support and its manifestations

the physical dynamics of a place. A nurturing environment which is distanced away from noise and unwanted activity has been shown to have various beneficial factors among women who are in vulnerable circumstances. Aside from women who are pregnant, the victims of domestic violence and abuse could benefit from a calm and tranquil environment which aids in the perceptual development of safety and security.

### Emotional

The scars from abuse/violence are not only superficial - there is emotional trauma which is experienced as well. This trauma is not only found in the victim, but also within the victim's relations such as family members and friends. provision for couples counselling, trauma counselling and support groups are good methods for assisting positive recuperation of victims and affected people alike.

The built environment itself plays a large role in inducing or combating feelings of vulnerability. An environment which allows the user more spatial and visual power conveys the notions of security and safety. this itself can contribute towards positive construction of place identity. spatial security can be achieved in numerous ways: horizontal and vertical spatial buffers distance vulnerable women from the street and all of its dangers. choice of vegetation can limit visibility, causing subconscious uncertainty which could induce further feelings of vulnerability. orientating the rooms of victims towards an internal courtyard could create the atmosphere of a safe sanctuary.

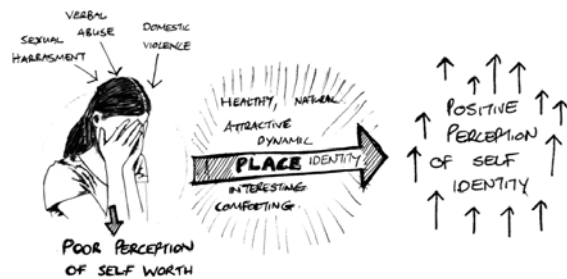


Figure 5 The connection between self identity and the built environment

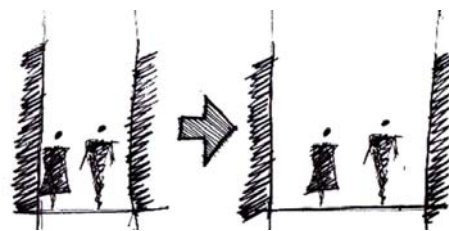


Figure 6 The built environment is subjected to various gender dynamics and social behaviours. Adequate spacing within pathways reduces feelings of vulnerability and protects personal space.

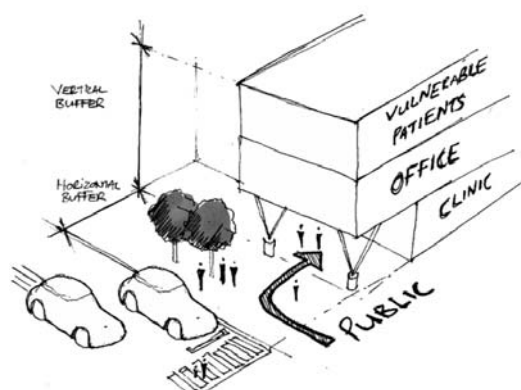


Figure 7 The positioning of sensitive spaces induces feelings of safety and security.

## Informational

Informational support refers to the provision of an infrastructure which essentially feeds individuals information which will assist them in vulnerable circumstances. This could be in the form of education, stimulating awareness or vocational development. This could be implemented into the environment through



various ways. An integral legal department will aid in the many endeavours put forth to empower women. A legal facility could help create awareness of rights which would drastically improve the quality of life for many women experiencing domestic or sexual violence, harassment or threats from criminals. Groups such as the rural women's legal group could also generate awareness with regard to subsidiaries and benefits available through government. legal professionals could also advise and therefore empower women by reinforcing rights and the prosecution of criminals. Providing facilities and services which offer training for women with regard to skills development and life orientation will allow the individual to experience independence as well as providing a self sustaining method for economic independence - a pivotal factor which could free women from abusive circumstances. Many women warrant ill treatment as a means of connecting to a source of financial income, either for oneself or children/dependants.

Figure 8 Vocational assistance empowering women

## FINAL DESIGN PRESENTATION



# SUPPORTING WOMEN WITHIN THE BUILT ENVIRONMENT

## A DESIGN PROPOSAL FOR A CIVIC SUPPORT CENTRE FOR DURBAN

### DESIGN PRIMER

#### INTRODUCTION

Socially restrictive systems such as patriarchy, colonialism and apartheid produced stigma regarding the involvement of women within society. These systems have manifested power relations and gender dynamics into the built environment and related infrastructure. Due to embedding beliefs from these systems which marginalised females, the resultant spaces remain largely unresponsive of women's needs and lifestyles. Women are thus often alienated within the urban fabric, affecting freedom of movement and social involvement.

This dissertation seeks to determine conditions and criteria which would inform the built environment so as to be more supportive of women with regard to these social and spatial challenges. The researcher put forth a theoretical framework which guided the investigation using the concept of 'supportiveness' along with the theories of genius loci and organic architecture. Relevant literature and past and present environments supportive of women, were explored. The information gathered was then evaluated through precedent, case studies and primary research to determine parallels or deviations.

The findings of this investigation validated that social and gender dynamics influence the way in which women perceive and utilize their environments. The ability for a space to foster an identity containing notions of freedom, informality, safety and democracy was proved to be imperative for supporting women. The study presents recommendations as to how built environments may be more supportive towards women, such as fostering a meaningful and nurturing identity as well as containing a safe and functional interface.

#### HYPOTHESIS

Spaces are platforms where social and gender dynamics are performed and perpetuated, architecture which is informed by and addresses the challenges of these dynamics towards females will influence the built environment so as to be more supportive of women.

#### THE PROBLEM

SOCIAL SYSTEMS AND MECHANISMS WHICH RESTRAIN WOMEN

COLONIALISM  
PATRIARCHY  
APARTHEID

#### KEY THEORIES

##### GENIUS LOCI - C. Norberg-Shulz

Many researchers have observed that women desire environments that convey meaning and a level of intimacy. This is deemed to be a solution for anonymous and homogeneous spatial conditions which induce anxiety among women (Westerman, 2012:6).

##### ORGANIC ARCHITECTURE - F. Lloyd Wright

Wright put forth the idea that all parts in an organic system are equal and that the part is as important to whole entity as the whole entity is to the part. Using this deduction Wright states that men should incorporate nature in his plans of development as this is the only way forth as an organic whole (Wright, 1945:127). This integration and importance of every individual in relation to each other and their environment is why Wright calls the organic architecture, the architecture of democracy.

#### PHYSICAL/EMOTIONAL ABUSE

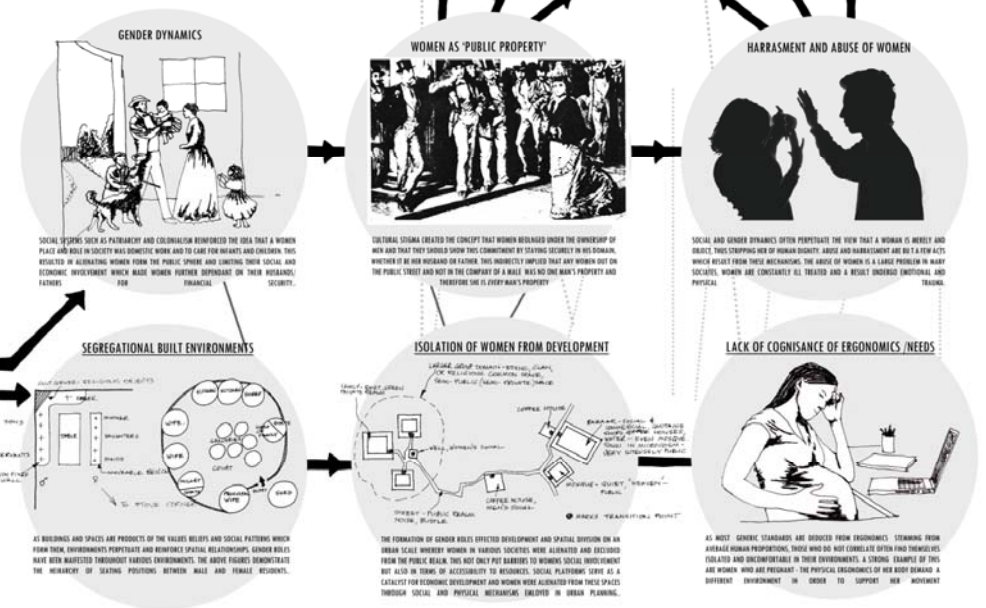
Domestic violence has an immense impact on the health of women, aside from physical injuries, the psychological scars are often more damaging in the long term. Psychosomatic disorders impact the overall quality of life among victims. Depression and post traumatic stress disorder are a few of the unhealthy impacts on the victim. As a means of coping with these situations many women resort to activities such as alcohol and substance abuse. Extreme cases even lead to self-infliction and suicide. In order to cope and recover from abuse many women withdraw from various social activities, including work, which therefore affects financial standing. Many women are afraid to seek out for help, either for fear of humiliation or social scrutiny. Physically many women could suffer a miscarriage or abnormal delivery of a child if subject to either physical or emotional abuse.

#### SEXUAL VIOLENCE

As the majority of acts of sexual violence are committed by someone known to the victim, the crime leads to an inability of the victim to connect with other people and to form trust with others after the incident. This extends to all forms of relationships from romantic to family and even colleagues at the workplace. The individual's understanding of concepts such as trust and hope are completely altered. The less through which the victim views strangers is also changed and the individual's perception of danger is multiplied. Thus the quality of life of the victim is impaired. Survivors feel detached and disconnected from everyday interactions. The victim is also afraid to speak out and seek help as they could feel embarrassed or ostracized and are thus further isolated from their support network.

#### TRAFFICKING

An important and interrelated issue to the abuse and rape of women is that of prostitution. Researchers indicate that 85% of prostitutes have experienced abuse or sexual violence in younger years. Depending on social factors, self-identity issues and the support (or lack thereof) readily available, many young girls resort to other activities as a means of coping with the trauma of these violent experiences. Drugs and alcohol often offer a temporary yet accessible escape and many women resort to the act of prostitution as a way of generating income. Prostitution has been said to be rife within Durban, many women are threatened that should they leave they will suffer physical, social and financial consequences. Health-care concerns. Prostitution results in lowered self-esteem and sense of self-respect, individuals are often ashamed of themselves and do not seek help and support due to fear of social alienation.



# SUPPORTING WOMEN WITHIN THE BUILT ENVIRONMENT

## A DESIGN PROPOSAL FOR A CIVIC SUPPORT CENTRE FOR DURBAN

# KEY THEORIES

### GENIUS LOCI



Many researchers have observed that women desire environments that convey meaning and a level of intimacy. This is deemed to be a solution for anonymous and homogeneous spatial conditions which induce anxiety among women (Westerman, 2012:8).

Norberg - Schulz states that people require and desire meaningful architecture in which to truly engage and interact with. These places have a metaphysical character and atmosphere called genius loci or the "spirit" of a place. There are three categories through which genius loci can be understood and interpreted: romantic, cosmic and classical (Norberg Schulz, 1980:49). The romantic classification relates to the unrestrained character and mysterious connotations of a place and draws its meaning from being dynamic and "alive." The place seems to achieve its character from the landscape and the dialogue between raw elements in nature. Romantic spaces are free from organisational control, and its meaning is metaphorical and indefinable yet prominent nonetheless. The dynamic nature of light is used to form and animate characteristics as opposed to the physical forms themselves. These places draw their existential qualities through the natural world and its elements (Norberg Schulz, 1980:49).

Classic architecture refers to man-made environments that manifest through logic, organisational control and definable structures. These environments create order which can be identified by various cultures as being political or social systems which classify and define boundaries, inclusion and exclusion. This form of architecture does not evade notions of genius loci on its own and must coincide with another category if existential meaning is to be achieved (Norberg Schulz, 1980:73).

Classic architecture is understood as an articulation of various elements, often on a larger scale. This refers to the characteristics of streets and settlements as opposed to spaces in individual buildings. These articulated landscapes can therefore contain a dynamic and animated character as the different activities and movements of people produce an atmosphere, even if various buildings are static and rigid (Norberg Schulz, 1980:72). It is stated that spaces such as these offer a democratic freedom in that there is no unquestionable system in place determining rational set factors and elements. These settings form their own "organic" processes, a living entity with its own catchment parts which function separately yet eventually link together. (Norberg Schulz, 1980:74)

These classifications are rarely found in isolation and complex architecture is the term used by Norberg Schulz to define the circumstances when all three classifications are encountered and evident (Norberg Schulz, 1980:75).



### ORGANIC ARCHITECTURE



The link between woman and the natural environment is well known and transcends the mere reproductive association. In Indian cosmology, the female principle is known as Prakriti and is synonymous with Mother Nature, representative of a playful and spontaneous entity. This primordial entity creates a diversity of living and non-living forms. The inanimate world however is not a Males shell, the rivers and mountains also contain a hidden consciousness (Shiva, 1980:39). Prakriti is also said to have created complementary factors, where the living and non-living creations require each other in order to exist, there is no distinction between the two. (Shiva 1988:41)

Wright put forth the idea that all parts in an organic system are equal and that the part is as important to whole entity as the whole entity is to the part. Using this deduction Wright states that man should incorporate nature in his plans of development as this is the only way forth as an organic whole (Wright, 1945:127). This integration and importance of every individual in relation to each other and their environment is why Wright calls the organic architecture, the architecture of democracy. Organic architecture is a philosophy which promotes a harmony between human habitation and the natural world through sensitive design approaches. A building is to be so well integrated with its surroundings through careful design that its form and form become part of the context. Schulz states that in order to produce an effective and meaningful space, the character and essence of the natural surroundings must be captured (Schulz, 1973:31)

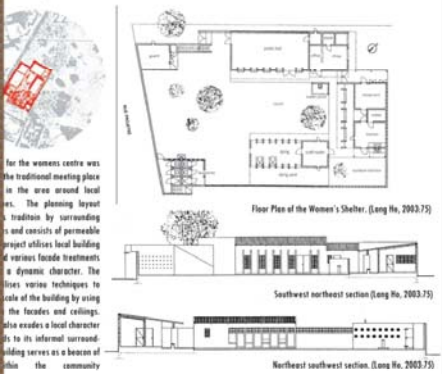
This theory is relevant to the study of hand as many spatial systems which have historically restricted women manifest their dividing characteristics through the process of boundary formation and unquestionable distinctions between zones. Organic architecture is a process which softens the distinction between the living and non-living and as a result produces a unconstrained and "free" natural environment (Wright, 1945).



# PRECEDENTS



### RUFISQUE WOMENS CENTRE



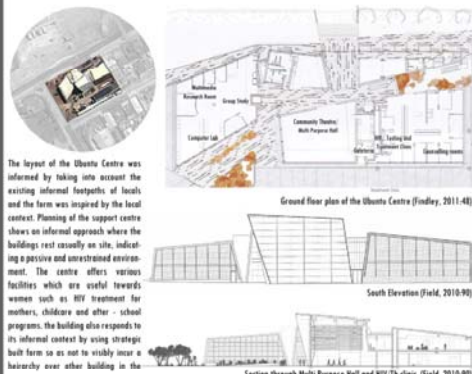
For the womens centre was the traditional meeting place in the area around local markets. The planning layout consists of permeable spaces and consists of various activities local building a dynamic character. The lines various techniques to scale of the building by using the facades and ceilings, also creates a local character to its informal surroundings serving as a beacon of light the community



The sun screens produce a pattern which breaks away from monotony and anonymous facades (Varehad, 2004:7)



### UBUNTU CENTRE



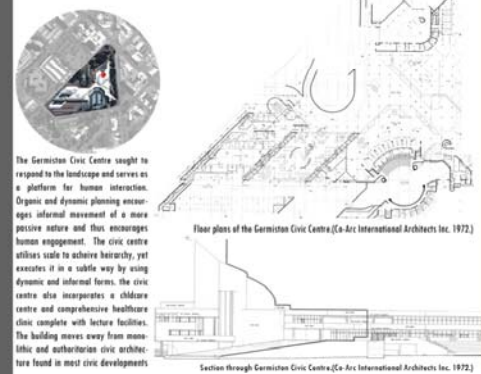
The layout of the Ubuntu Centre was informed by taking into account the existing informal footpaths of locals and the form was inspired by the local context. Planning of the support centre shows an informal approach where the buildings rest casually on site, indicating a passive and unstructured environment. The centre offers various facilities which are useful towards women such as HIV treatment for mothers, childcare and after - school programs, the building also responds to its informal context by using strategic built form so as not to visibly usurp a hierarchy over other building in the area



The trapezoidal forms maintain an informal dialogue with its context (www.arvisreka.com/raos/ubantu-education/fund)



### GERMISTON CIVIC CENTRE



The Germiston Civic Centre sought to respond to the landscape and serves as a platform for human interaction. Organic and dynamic planning encourages informal movement of a more passive nature and thus encourages human engagement. The civic centre allows scale to achieve hierarchy, yet executes it in a subtle way by using dynamic and informal forms, the civic centre also incorporates a childcare centre and comprehensive healthcare clinic, complete with lecture facilities. The building moves away from monolithic and authoritarian civic architecture found in most civic developments



The bricks create a horizontal pattern along the facades which diminishes the scale of the building (www.co-arc.com)

# SUPPORTING WOMEN WITHIN THE BUILT ENVIRONMENT

## A DESIGN PROPOSAL FOR A CIVIC SUPPORT CENTRE FOR DURBAN

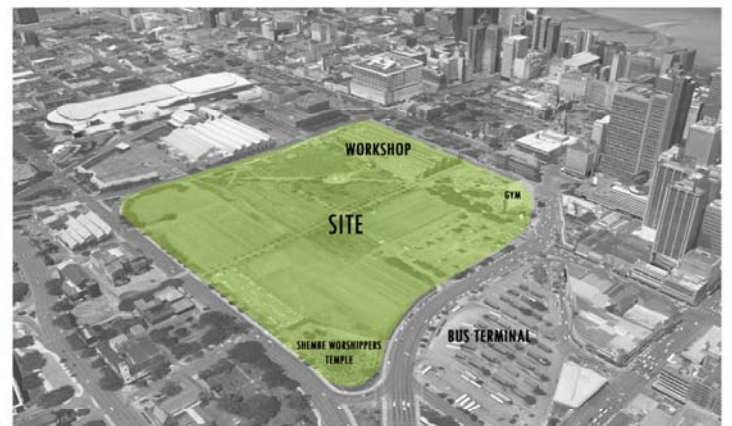
# SITE SELECTION

### CHOSEN SITE

THE CHOSEN SITE IS WELL LOCATED WITHIN THE CITY CENTRE AND IS SITUATED ADJACENT TO GUGU DLAMINI PARK, A HISTORICALLY PROMINENT AREA. IN TERMS OF LOCALITY IN THE BROAD SENSE, THE SITE IS ACCESSIBLE FROM WARWICK JUNCTION, BUS STOPS AND TAXI TERMINALS AS WELL AS THROUGH THE USE OF ACKNOWLEDGED PEDESTRIAN ROUTES BY STREETLIGHT. PROMINENT BUILDINGS WITHIN THE VICINITY ARE THE WORKSHOP, THE VIRGIN ACTIVE GYM, TOURISM BUILDING, CHURCH SQUARE MARKET AND THE CITY HALL. THE SITE IS THEREFORE VERY PUBLIC AND IS SITUATED IN AN AREA WHICH CONTAINS A MIXED USE OF ACTIVITIES AND DRAWS IN A DIVERSITY OF PEOPLE. THE MAJOR PEDESTRIAN ROUTES ALONG THE SITE ENSURE A SAFE FABRIC IN WHICH TO IMPLEMENT AN INTERVENTION REGARDING WOMEN.

### JUSTIFICATION OF SITE

THE SITE IS WITHIN A SOCIALLY SIGNIFICANT AREA. WHATEVER CONDITIONS IT CONTAINS, IT REINFORCES WITHIN THE PUBLIC EYE. WHATEVER IS CONSIDERED IMPORTANT TO THE PEOPLE OF DURBAN IS FOUND WITHIN THE CITY CENTRE. A GOAL WHICH DURBAN, AND ANY OTHER CITY IN SOUTH AFRICA STRIVES TOWARDS, IS TO GENERATE ITS OWN NATIONAL IDENTITY TO REPRESENT THE POST COLONIAL AND POSTAPARTHEID VALUES AND BELIEFS WHICH THE COUNTRY EMBODIES. AS THE RESTRICTION AND OPPRESSION OF WOMEN WAS AN IMMENSE PROBLEM THROUGHOUT THE HISTORY OF THE COUNTRY, THE RESEARCHER FEELS THAT AN INTERVENTION REFLECTIVE OF THE RESILIENT AND CURRENT ISSUES COULD BE SITUATED WITHIN THIS AREA.



### ISSUES AND OPPORTUNITIES PRESENTED BY THE SITE

THE SITE IS QUITE LARGE AND UNUSED AT PRESENT. CURRENT PLANS FOR A SCIENCE EXHIBITION CENTRE AND A NEW CIVIC LIBRARY HINT AT THE CITY'S INTENT OF FOSTERING A NEW DYNAMIC IDENTITY. THE SITE IS EMPTY HOWEVER AND AN URBAN INTERVENTION IS NEEDED IN ORDER TO MAXIMISE THE POTENTIAL OF THE SPACE. THERE CURRENTLY EXISTS A SUPERBASEMENT ALLOWING THE ENTIRE SURFACE AREA ABOVE TO BE FULLY PEDESTRIAN. CHURCH STREET RUNS THROUGH THE SITE AS IS OFTEN DEPICTED BY THE MUNICIPALITY AS HAVING POTENTIAL TO FORM A VISTA TOWARDS THE HARBOUR AND ENCOMPASSING THE CITY HALL, EXISTING.

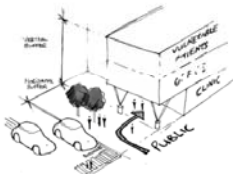
### EXISTING CONDITIONS

THERE ARE A FEW EXISTING CONDITIONS WHICH NEED TO BE CONSIDERED. TO THE NORTH OF THE SITE THERE IS A Smebke WORKSHIPPERS TEMPLE, TO THE EAST THERE IS THE GUGU DLAMINI PARK PRECINCT AND EXISTING BUILDINGS INCLUDE THE WORKSHOP AND THE VIRGIN ACTIVE GYM. THERE IS ALSO A UNIQUE TRADING ELEMENT FOUND ON SITE AND IS FULL OF PUBLIC LIFE AT VARIOUS TIMES THROUGHOUT THE DAY. THE EXISTING CENTRAL PEDESTRIAN PATH IS WELL KNOWN AND USED FREQUENTLY. STATISTICS SHOW THAT THE MAJORITY OF PEDESTRIANS IN THE CITY ARE WOMEN, AN INTERESTING FIND WHICH HIGHLIGHTS THE IMPORTANCE OF THE ISSUE AT HAND.

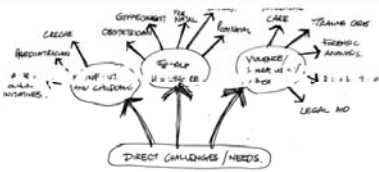
# SUPPORTING WOMEN WITHIN THE BUILT ENVIRONMENT

A DESIGN PROPOSAL FOR A CIVIC SUPPORT CENTRE FOR DURBAN

# DESIGN CONCEPT



**A SAFE AND NURTURING ENVIRONMENT**  
A nurturing environment which is distanced away from noise and unwanted activities has been shown to have numerous benefits for women who are in vulnerable circumstances, those from whom they are pregnant, the victims of domestic violence and abuse, those who have been sexually abused, and those who are in the process of developing a safety and security plan.



**DIRECTLY RESPONDING TO NEEDS AND CHALLENGES FACED BY WOMEN.** Many of the challenges and lifestyle related needs of vulnerable women can be directly addressed by providing tangible support in terms of professional services and facilities. Collaborating with third sector groups, tangible healthcare, mental and childcare and centres for victims of abuse, this proposal provides women with a holistic mix of the above facilities as well as:



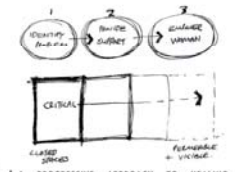
**PLACE IDENTITY AS AN INTEGRAL PART OF AN INDIVIDUALS SELF PERCEPTION** The way place and identity are not only interlinked, these two concepts are intertwined as well. This means it is not only found in the way we see the world but also in the way we see ourselves. This is especially true for women who are victims of domestic violence and abuse. These women often have a poor perception of self worth and a negative perception of their place in the world. This is often due to the way they have been treated and the way they have been perceived by others. This is often due to the way they have been treated and the way they have been perceived by others.



**DIRECT COUNSELLING FOR PATIENTS, FAMILY MEMBERS AND FRIENDS**  
The training which focuses on issues such as abuse, sexual violence and harassment can extend far past the victim care and counselling for the victim family and friends. It is important to ensure that the training is not only for the victim but also for the family and friends. This is because the impact of domestic violence and abuse is often felt by the family and friends as well. This is why it is important to provide training for them as well.

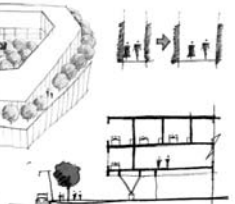


**ATMOSPHERE AND CHARACTER OF THE BUILT ENVIRONMENT**  
People immediately attach various associations with their environment based on the character of the space. These associations can be positive or negative. In that way, the environment can be used to create a positive atmosphere. This is why it is important to create a built environment that is safe, secure, and nurturing. This is why it is important to create a built environment that is safe, secure, and nurturing.



**A PROGRESSIVE APPROACH TO HEALING**  
People who have been affected by domestic violence and abuse often experience a range of physical, emotional, and psychological issues. These issues can be addressed through a progressive approach to healing. This approach involves a range of services, including counseling, medical care, and legal support. This is why it is important to create a built environment that is safe, secure, and nurturing.

**HOW THE BUILT ENVIRONMENT COMBATS/INDUCES VULNERABILITY**  
A built environment which is safe, secure, and nurturing can help to reduce the risk of vulnerability. This is because a safe and secure environment can help to reduce the risk of domestic violence and abuse. This is why it is important to create a built environment that is safe, secure, and nurturing.



**THE DEVELOPMENT OF VOCATIONAL AND LIFE SKILLS FOR WOMEN**  
Providing facilities and services which offer training for women who are victims of domestic violence and abuse can help to improve their vocational and life skills. This is because training can help to improve their self-esteem and confidence. This is why it is important to create a built environment that is safe, secure, and nurturing.



**MATERNAL, INFANT AND CHILD CARE**  
Providing facilities and services which support women who are pregnant, the victims of domestic violence and abuse, and those who are in the process of developing a safety and security plan can help to improve their maternal, infant and child care. This is because these facilities and services can help to reduce the risk of domestic violence and abuse. This is why it is important to create a built environment that is safe, secure, and nurturing.



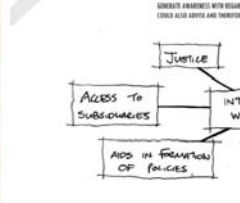
**ACCESSIBLE HEALTHCARE FACILITIES**  
Providing facilities and services which support women who are pregnant, the victims of domestic violence and abuse, and those who are in the process of developing a safety and security plan can help to improve their accessible healthcare facilities. This is because these facilities and services can help to reduce the risk of domestic violence and abuse. This is why it is important to create a built environment that is safe, secure, and nurturing.



**FITNESS AND PHYSICAL FACILITIES**  
Providing facilities and services which support women who are pregnant, the victims of domestic violence and abuse, and those who are in the process of developing a safety and security plan can help to improve their fitness and physical facilities. This is because these facilities and services can help to reduce the risk of domestic violence and abuse. This is why it is important to create a built environment that is safe, secure, and nurturing.



**LEGAL FACILITIES AND ASSISTANCE**  
Providing facilities and services which support women who are pregnant, the victims of domestic violence and abuse, and those who are in the process of developing a safety and security plan can help to improve their legal facilities and assistance. This is because these facilities and services can help to reduce the risk of domestic violence and abuse. This is why it is important to create a built environment that is safe, secure, and nurturing.



**TANGIBLE SUPPORT**



**EMOTIONAL SUPPORT**

**SUSTAINABLE SUPPORT**

**INFORMATIONAL SUPPORT**



**AWARENESS AND REINFORCEMENT OF VALUES AND BELIEFS**  
Creating awareness of the needs and interests of women will be extremely beneficial as it challenges common gender stereotypes and empowers the victim. This is because awareness can help to reduce the risk of domestic violence and abuse. This is why it is important to create a built environment that is safe, secure, and nurturing.



# SUPPORTING WOMEN WITHIN THE BUILT ENVIRONMENT

## A DESIGN PROPOSAL FOR A CIVIC SUPPORT CENTRE FOR DURBAN

# DESIGN PROCESS

### BRIEF

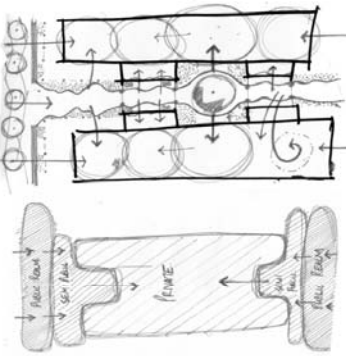
Located within the civic centre of Durban's city fabric, the support centre will contain amenities and services which will address the challenges faced by women within the city. The facility will offer functionality through varying degrees of privacy — public crèches and women's clubs will be closer to the public realm whereas sensitive spaces such as support for abuse women will be visually buffered and private, the spatial relationships between the spaces will be conducive to generating awareness and providing a viable platform of support for women in Durban. Care of placement of spaces in the form of a journey will assist vulnerable individuals with their problems and issues.

### CLIENTS

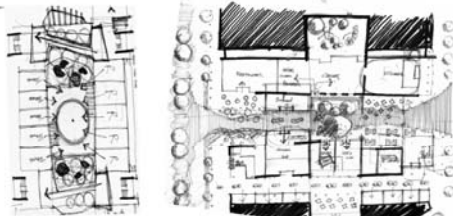
In response to the issue at hand, as well as taking into account the concept of sustainable support, there will be a variety of clients which will be accommodated within the proposed building. These facilities will offer distinct services to women yet will all form part of a sustainable system which seeks to support and empower women. As the building is located within an extremely public vicinity

- **POWA (People Against Women Abuse)**  
POWA is a non-governmental organisation which undertakes research into gender-based violence in Africa. The organisation campaigns on particular aspects of women's rights at a time in order to galvanise the focus of society to specific challenges.
- **Shiloh House of Hope**  
The Crisis centre is a non-governmental organisation which seeks to aid and support women in vulnerable circumstances. Elderly, abused and harassed women are offered counselling and a temporary premises to stay. What would be beneficial however is
- **Ethekezi Municipality**  
Urban crèches offer numerous benefits to women and society at large. A safe place near a civic node would be convenient and valid as it offers a premises where children can be left whilst parents or caretakers can attend to other interests or activities such as handling municipal matters, paying bills or utilising a nearby clinic.

### FOOTPRINT AND SPATIAL RELATIONS



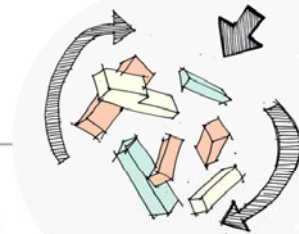
The first and foremost challenge was determining an interface through which women in vulnerable circumstances can be reached, this was achieved through reaching the individual by using various activities as stepping stones, these activities would be of a family oriented nature, such as a crèche, paediatrician, restaurants, retail and a gallery, as determined by primary research, the appropriate architectural response regarding sensitive issues is through gradual and passive progress, both mentally and in physical space, this progression also manifests through the movement from the public realm into the semi private and then the private, this clear distinction allows for various benefits and allows for a gradual and easy transition between spaces.



### MANIFESTATION OF CONCEPT

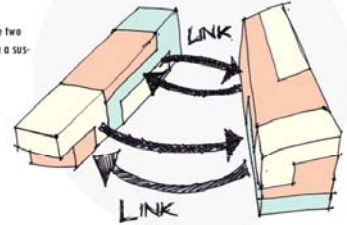


Step one, manifest each tier of supportiveness into a physical mass orientated towards each focus area.

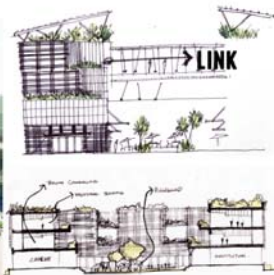


Step two, fragment and mix the functionality so that the building offers facilities which run concurrently and within a sustainable manner

Step three, link the two massings to create a sustainable system.



### CREATING MEANINGFUL AND SIGNIFICANT SPACES

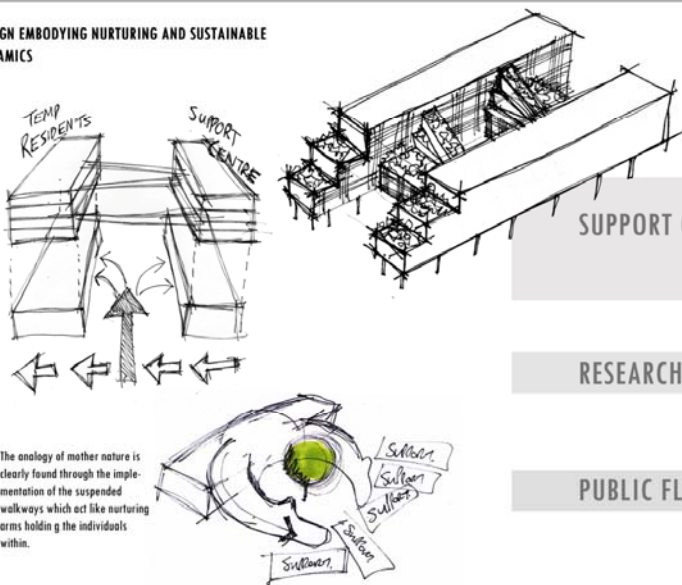


### APPROPRIATE SCALE AND AESTHETICS

As the focus of this study is towards vulnerable women, the scale and aesthetic treatment of the building needs to take cognisance of vulnerability and respond accordingly. An intricate facade adds texture and reduces the scale of the building. A woven pattern began to emerge and the space appears more user friendly due to the increase in human scale elements.  
Adding a singular element in the middle of the development will add a sense of clarity, focus and purpose. A large singular tree was determined to be an appropriate vehicle with which to accomplish this. The suspended glass walkways adds metaphorical meaning on many levels as the presence of the vulnerable women are publicly shown but their identity is not compromised.



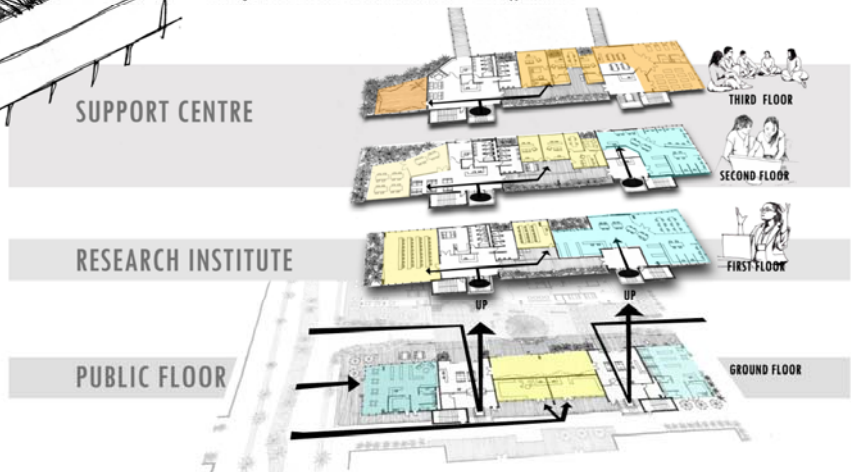
### DESIGN EMBODYING NURTURING AND SUSTAINABLE DYNAMICS



The analogy of mother nature is clearly found through the implementation of the suspended walkways which act like nurturing arms holding the individuals within.



The support centre functions by having separate amenities on two main wings, both wings offer an urban response on ground level through the provision of retail and commercial stores. From the ground floor up however, each flank becomes dedicated towards a particular activity, the eastern wing houses temporary residential quarters for abused women and children whilst the right flank consists of a social support centre which is accessible both by the in house residents and women entering the building from the pedestrian streets. The Diagram below shows the various activities housed within the support centre.



# SUPPORTING WOMEN WITHIN THE BUILT ENVIRONMENT

A DESIGN PROPOSAL FOR A CIVIC SUPPORT CENTRE FOR DURBAN

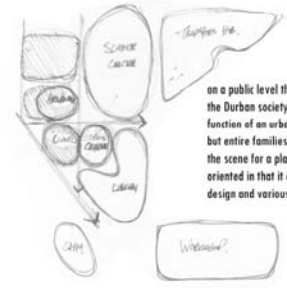
## URBAN DESIGN



The urban design proposal seeks to create a more pedestrian friendly environment which encourages human interaction and engagement.

A Clear definition of public, semi public and private domains will allow for a safer and more efficient development. The introduction of street furniture and planters also reduces the scale of street and creates a more interactive and 'lively environment.'

thresholds guide individuals along vistas whilst adding security and order within the urban precinct. Building footprints are mostly under 100m which allows for ease of access and walkability.



on a public level the urban scheme offers various services to the Durban society. The support centre offers the public function of an urban creche which not only draws in mothers, but entire families, in this way the urban environment sets the scene for a place which is family and relationship oriented in that it celebrates human interaction through its design and various functions.

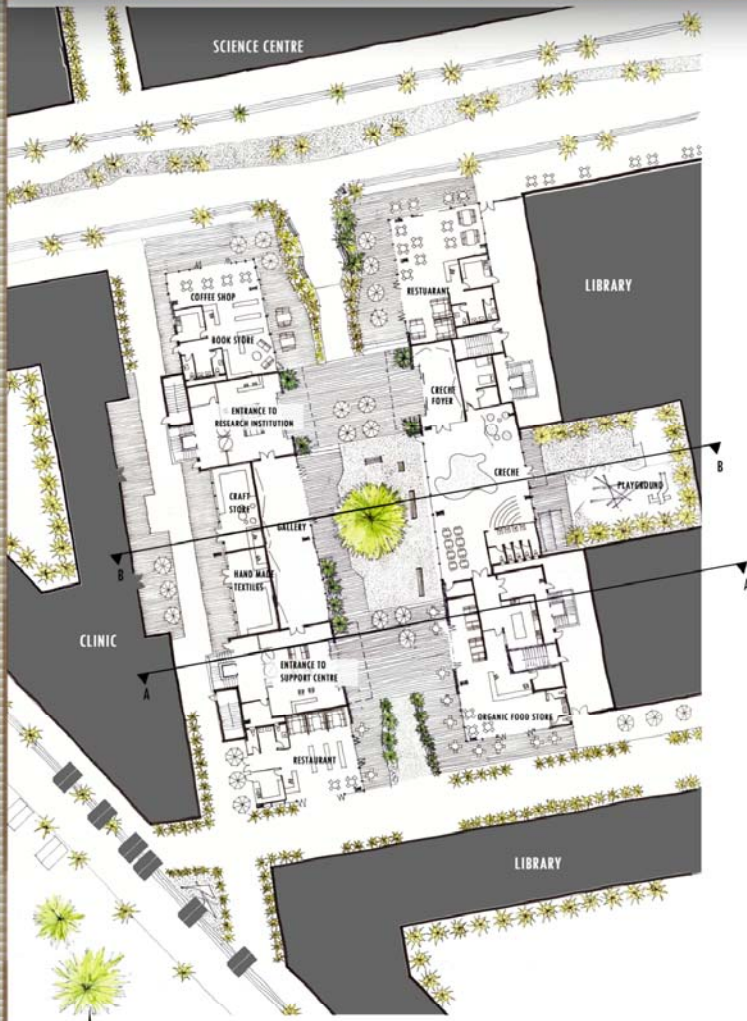
## SITE PLAN SCALE 1:500



# SUPPORTING WOMEN WITHIN THE BUILT ENVIRONMENT

A DESIGN PROPOSAL FOR A CIVIC SUPPORT CENTRE FOR DURBAN

## FLOOR PLANS



GROUND FLOOR PLAN  
SCALE 1:200



BASEMENT FLOOR PLAN  
SCALE 1:200



FIRST FLOOR PLAN  
SCALE 1:200



SECOND FLOOR PLAN  
SCALE 1:200



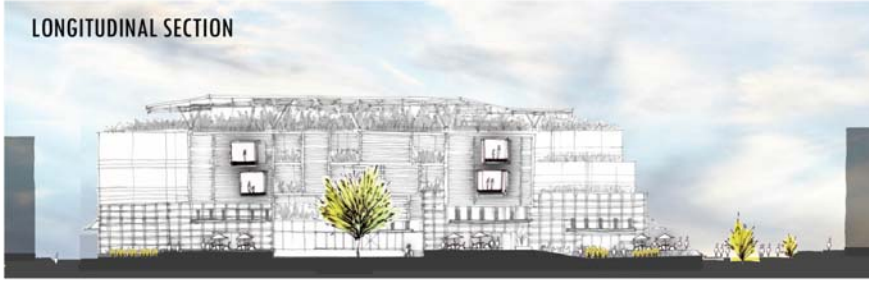
THIRD FLOOR PLAN  
SCALE 1:200

# SUPPORTING WOMEN WITHIN THE BUILT ENVIRONMENT

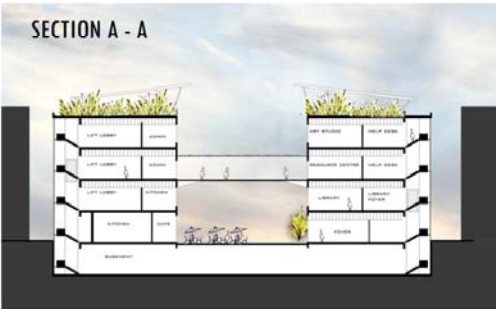
»» A DESIGN PROPOSAL FOR A CIVIC SUPPORT CENTRE FOR DURBAN

## DESIGN PROPOSAL

LONGITUDINAL SECTION



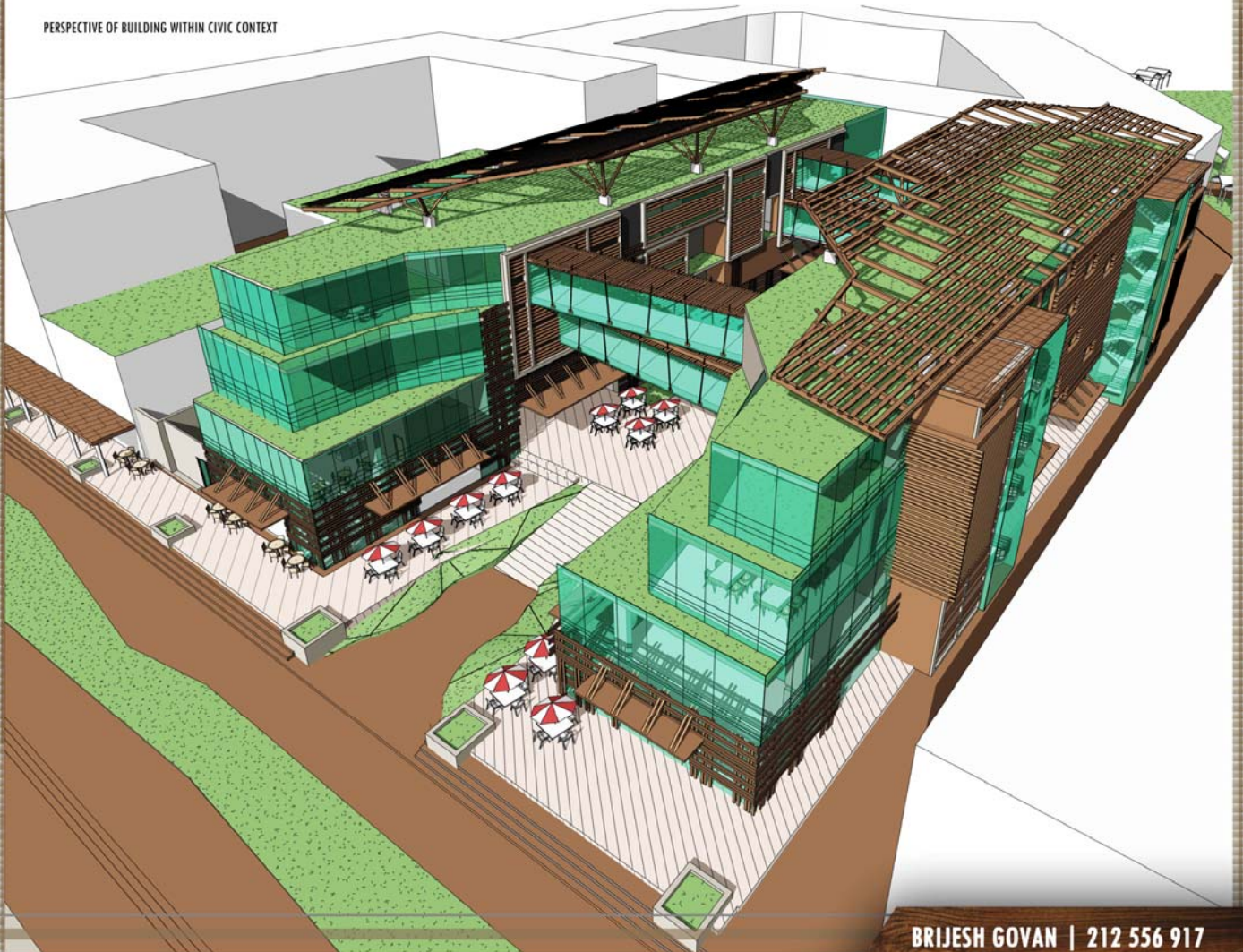
SECTION A - A



SECTION B - B



PERSPECTIVE OF BUILDING WITHIN CIVIC CONTEXT



BRIJESH GOVAN | 212 556 917

# SUPPORTING WOMEN WITHIN THE BUILT ENVIRONMENT

»» A DESIGN PROPOSAL FOR A CIVIC SUPPORT CENTRE FOR DURBAN

## DESIGN PROPOSAL

EAST ELEVATION



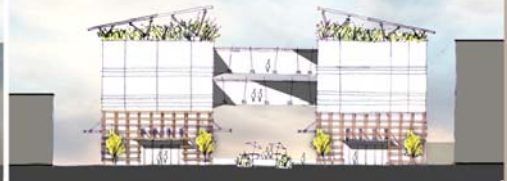
EAST ELEVATION



WEST ELEVATION



SOUTH ELEVATION



### PERSPECTIVE OF SUPPORT CENTRE

THE BUILDING OFFERS AN APPROPRIATE FORM AND APPEARANCE WITH REGARD TO THE ISSUES AT HAND. ON GROUND LEVEL, THE REGION OF ULTIMATE PUBLIC INTERACTION, THE BUILDING OFFERS A UNIQUE WOVEN FACADE WHICH REDUCES THE SCALE OF THE BUILDING WHILST ALSO HIGHLIGHTING SIGNIFICANCE OF DETAIL. VEGETATION IS CELEBRATED THROUGHOUT THE BUILDING AND THIS ADDS LIFE AND A SENSE OF SUSTAINANCE. THE BUILDING MAKES USE OF LARGE GLASS FACADES WHICH ADD TRANSPARENCY AND LIGHTNESS TO THE SCHEME. THE USE OF GLASS ALSO VISUALLY CONNECTS THE BUILDING TO THE SKY, HINTING AT A FORM OF ASCENSION CONTAINED WITHIN. THE GLASS IS PROXIED AND OFFERS LOW TRANSLUCENCY - SUCH THAT THE PRESENCE OF THE VULNERABLE WOMEN WITHIN IS STILL FELT WITHIN SOCIETY YET THEIR OWN PERSONAL IDENTITY IS NOT COMPROMISED.



BRIJESH GOVAN | 212 556 917



# 1.7 TECHNICAL RESOLUTION.

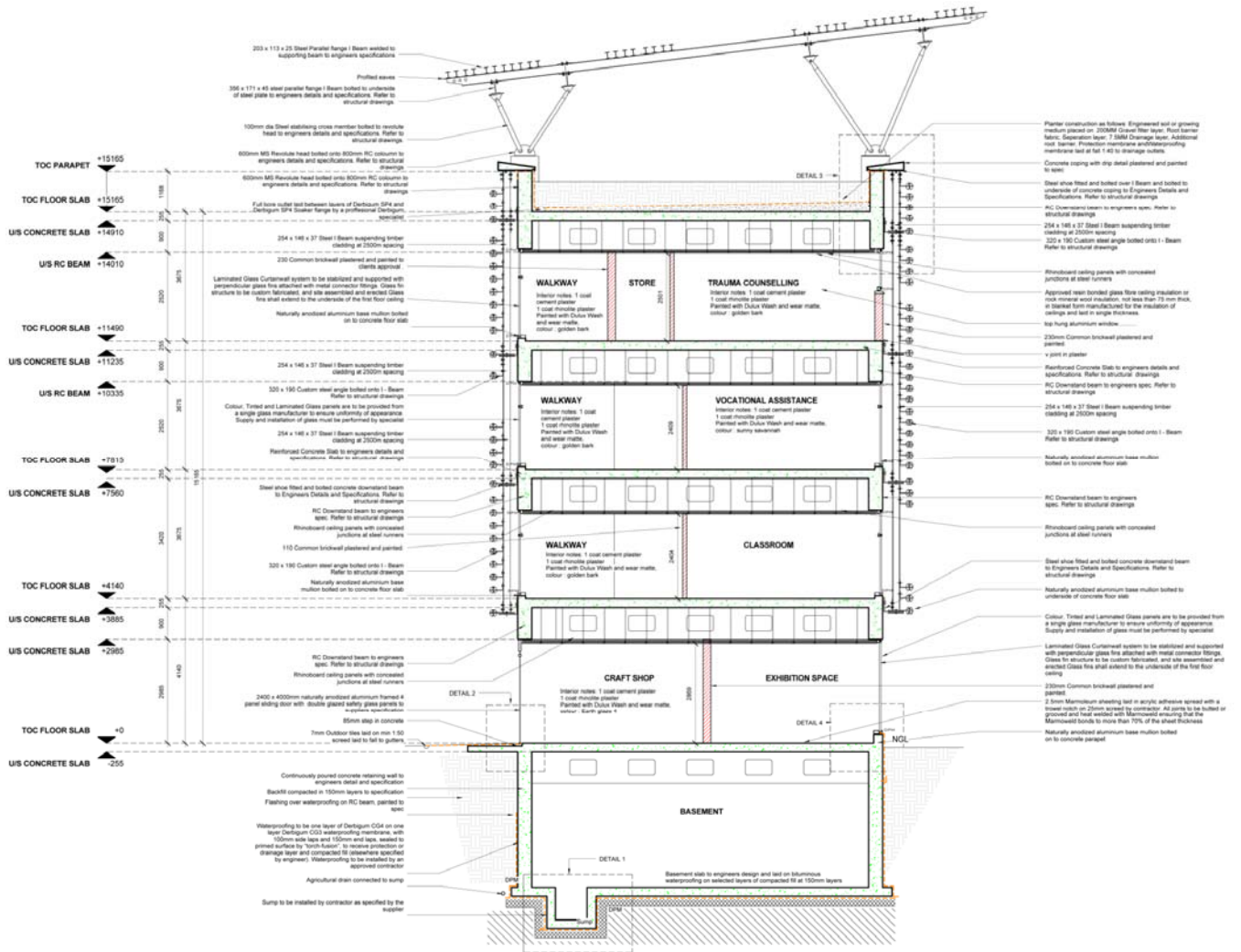


Figure 9. Cross section through building

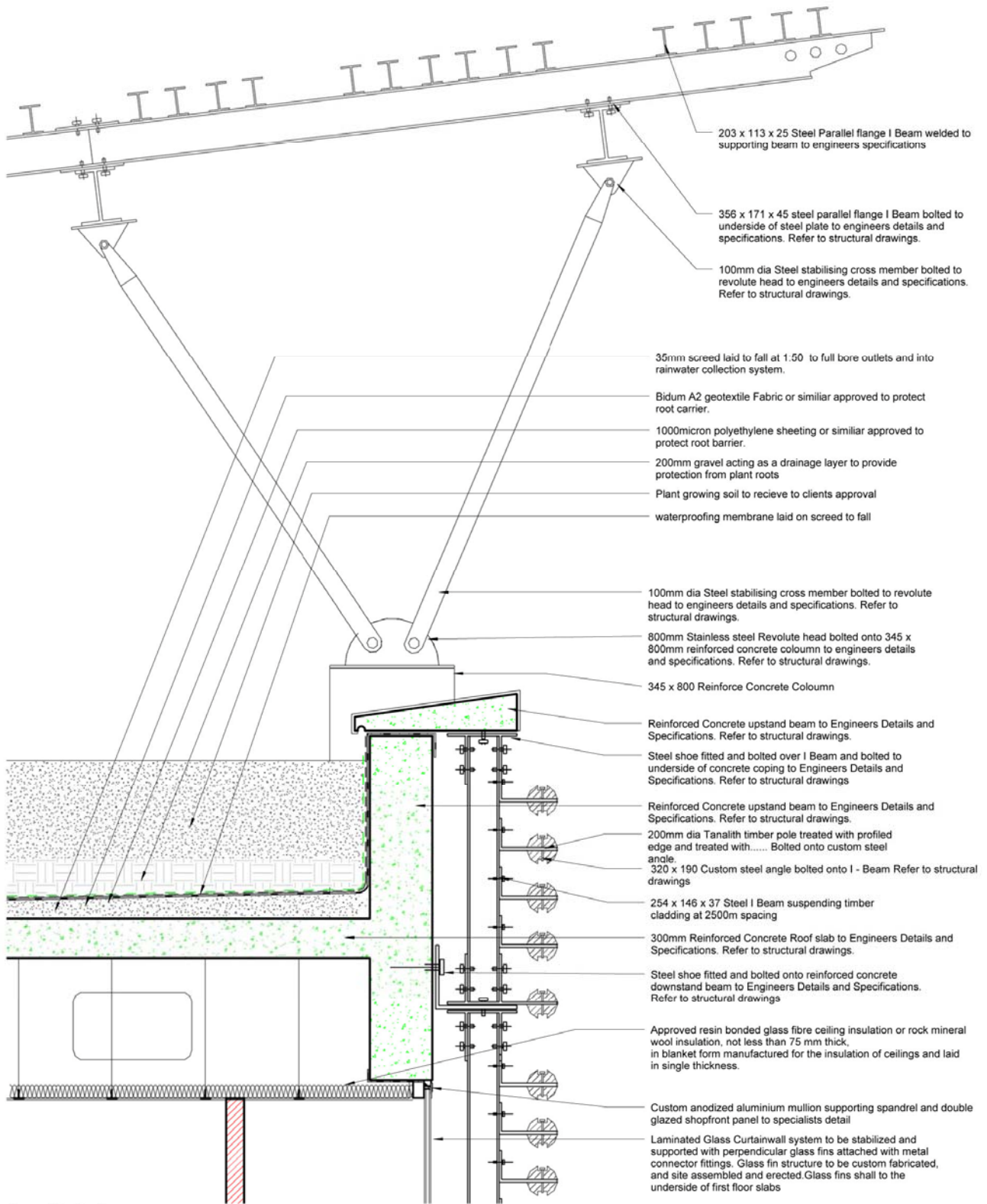


Figure 10. Detailing of roof and cladding structure

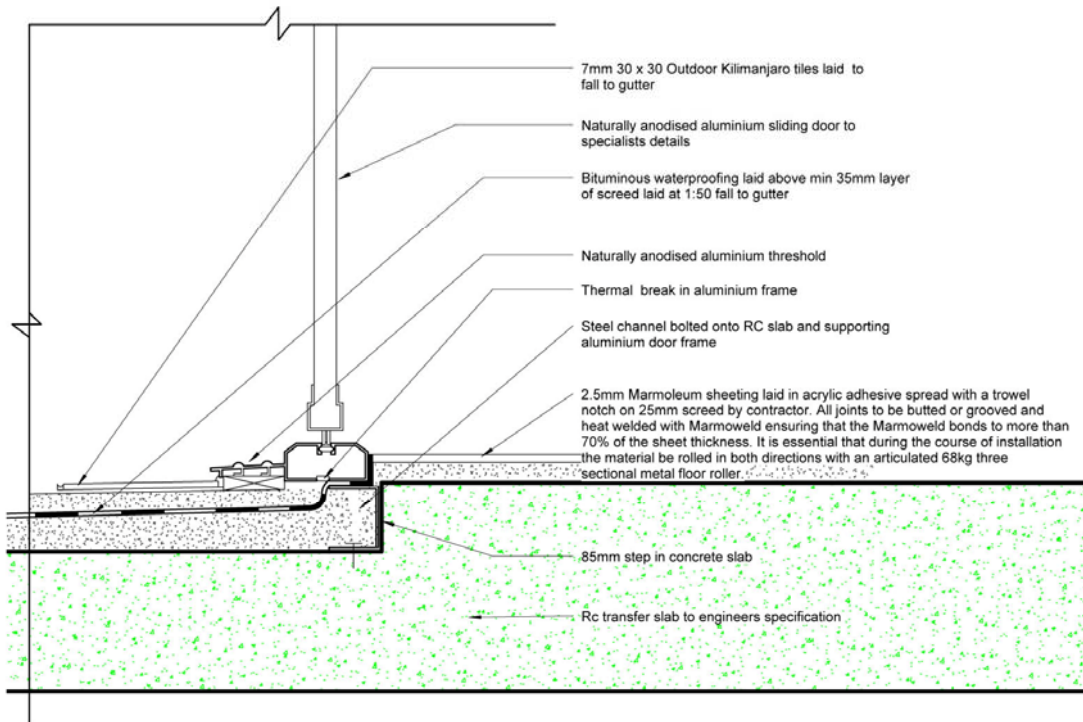


Figure 11. Detailing of sliding door frame

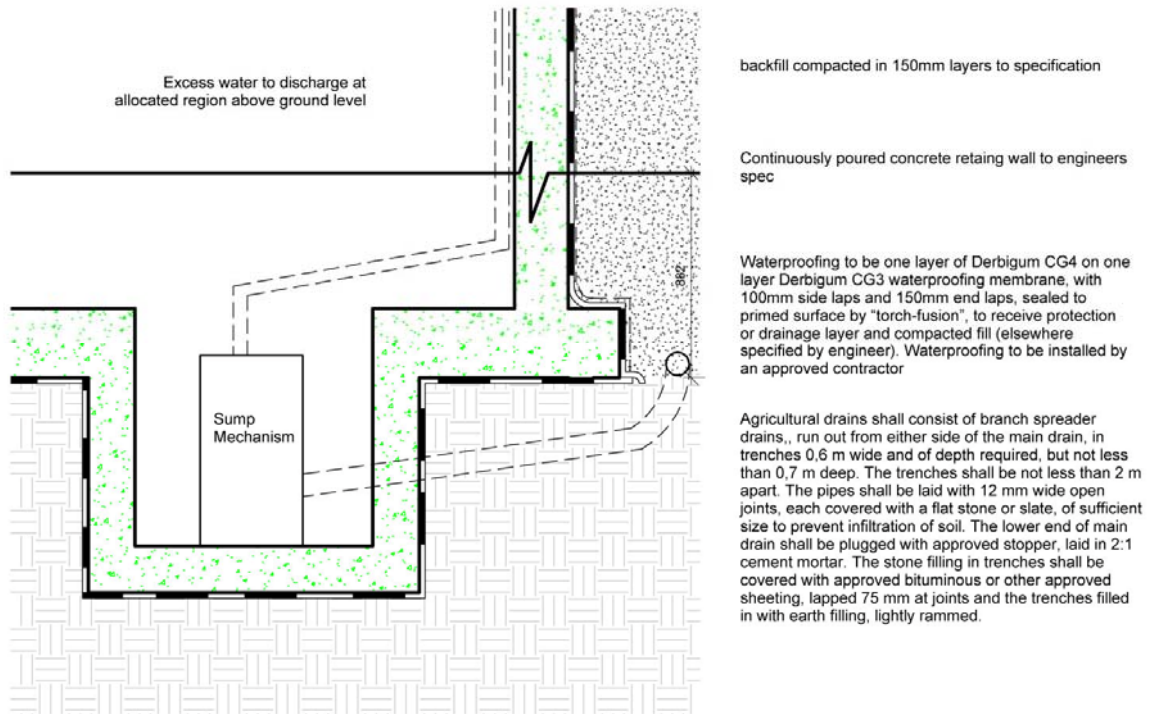


Figure 12. Detailing of sump

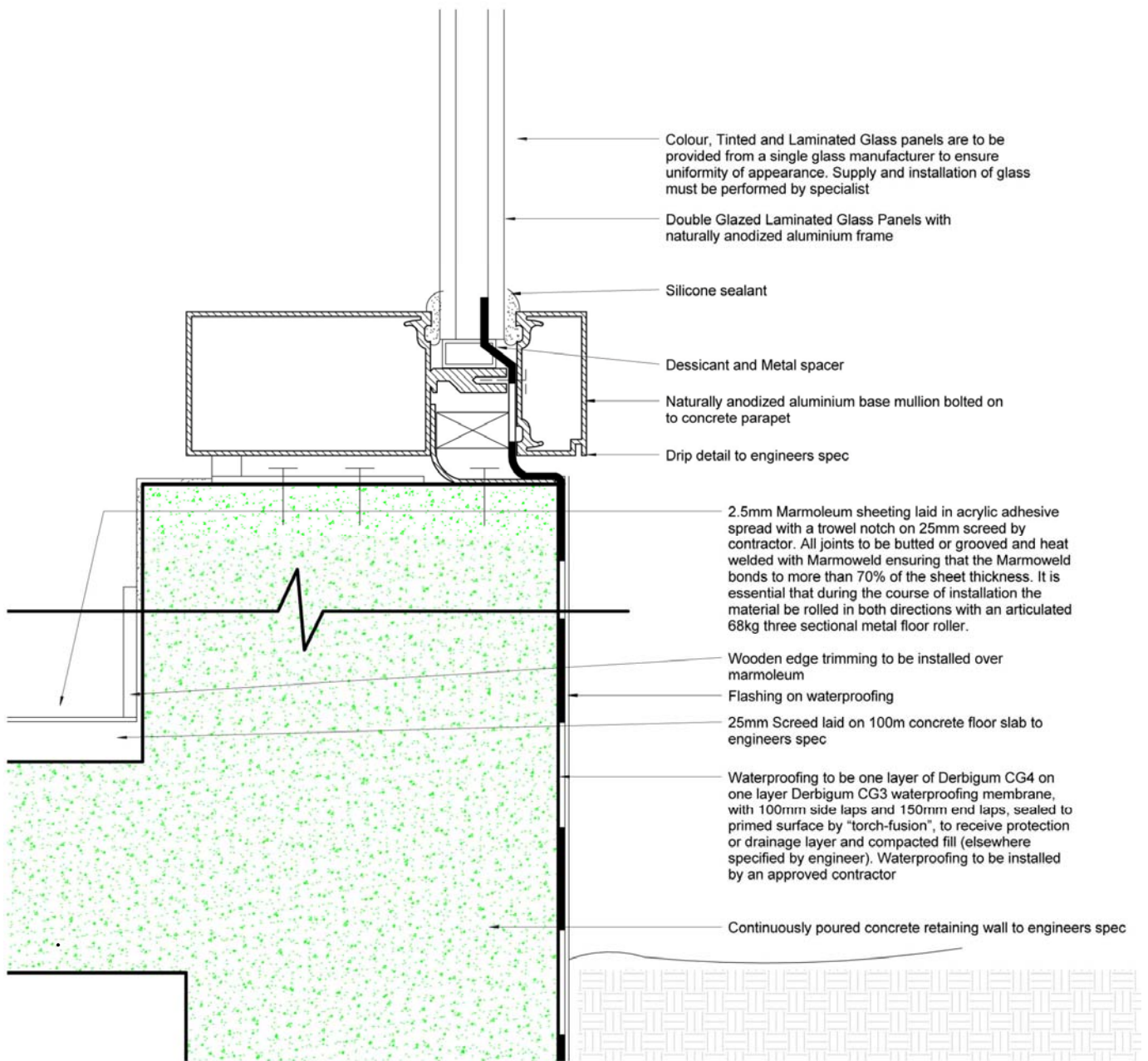


Figure 13. Detailing of curtain wall base mullion.

## REFERENCES

**Wasserman, V** (2012) *Open spaces, closed boundaries: transparent workspaces as clerical female ghettos*. From the International Journal, *Work Organisation and Emotion*, Vol. 5, No. 1. 2012.

**Norberg-Shulz, C** (1980) *The Genius Loci: Towards a Phenomenology of Architecture*, Academy Editions, London

**Shiva, V** (1988) *Staying Alive. Women, Ecology and Development*. London

**Wright, F** (1945) *When democracy builds*. University of Chicago

## LIST OF FIGURES

<b>Figure 1</b> Location of selected site	122
<b>Figure 2</b> Typical morning solar study (top left) and typical afternoon solar study of the proposed support centre and its surrounding context	124
<b>Figure 3.</b> The researcher formulated the concept of Sustainable support	125
<b>Figure 4</b> Tangible support and its manifestations	125
<b>Figure 5</b> The connection between self identity and the built environment	126
<b>Figure 6</b> The built environment is subjected to various gender dynamics and social behaviours. Adequate spacing within pathways reduces feelings of vulnerability and protects personal space	126
<b>Figure 7</b> The positioning of sensitive spaces induces feelings of safety and security	126
<b>Figure 8</b> Vocational assistance empowering women	127
<b>Figure 9.</b> Cross section through building	139
<b>Figure 10.</b> Detailing of roof and cladding structure	140
<b>Figure 11.</b> Detailing of sliding door frame	141
<b>Figure 12.</b> Detailing of sump	141
<b>Figure 13.</b> Detailing of curtain wall base mullion	142